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ON

LABORIOUS PARTURITION.

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AN ESSAY ON LABORIOUS PARTURITION:

IN WHICH THE DIVISION of the SYMPHYSIS PUBIS IS PARTICULARLY CONSIDERED.

REQUIRERE ETIAM, SI RATIO IDEM DOCEAT, QUOD EXPERIENTIA, AN ALIUD. CELSUS. PRÆF. P. 10.

By WILLIAM OSBORN, M. D.
PHYSICIAN AND MAN-MIDWIFE TO THE GENERAL LYING-IN HOSPITAL IN STORE STREET, AND LECTURER ON MIDWIFERY IN LONDON.

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IN

STORE STREET,

THIS ESSAY IS INSCRIBED,

AS

A TESTIMONY OF GRATITUDE AND RESPECT,

BY THE

AUTHOR.

PREFACE.

ALTHOUGH in a *ſyſtem* of midwifery, it is eſſentially neceſſary to conſider the various degrees of difficulty, included in the general technical term of *Laborious Parturition*; yet it does not come within the intention of this *Eſſay*, to treat of any other, than that degree only, which depending on the diſtorted form, and diminiſhed capacity of the

pelvis, is incompatible with the ſafety of both mother and child. In this caſe, the life of the child muſt of neceſſity be ſacrificed to the preſervation of the mother, or the mother herſelf, for the certain ſafety of her child, muſt be doomed to inevitable deſtruction by the *Cæſarian operation*; or for a precarious chance, and the ſlendereſt probability of ſafety to her child, ſhe muſt at leaſt be expoſed to the pain and danger of the *Diviſion of the ſymphyſis pubis*. This laſt operation was lately invented, and performed at Paris by Monſ. Sigault, with an intention to ſuperſede the neceſſity of the Cæſarian ſection, and infallibly to preſerve both parent and child; and as it has much engaged

gaged the attention, and divided the opinions of medical men throughout the Continent; one chief purpoſe of this eſſay, is candidly to review that ſubject, and to inquire, how far it has anſwered the ſanguine expectation of its firſt friends, or *how far experience has correſponded with theory*, by collecting the hiſtory and events of all the caſes in which it has been performed, and preſenting them to my readers, as the only ſatisfactory evidence, which can determine the genuine merit of this, or any other invention.

Previous however to this inquiry, I ſhall firſt endeavour to obviate ſome objections, deduced from analogy, and ſpeciouſly ap-

plied to depreciate the ſcience of midwifery, by demonſtrating the phyſical neceſſity of the difficulties and dangers in human parturition, becauſe dependent on the very form and poſition of our body.

I ſhall then proceed to make ſome obſervations on laborious parturition, but paſſing by, (at leaſt upon the preſent occaſion) all the inferior degrees of deformity and difficulty, I ſhall firſt deſcribe, and aſcertain, thoſe dimenſions of the pelvis, which abſolutely, and in all caſes require, to accompliſh delivery, ſuch violence, as is inconſiſtent with the common ſafety both of mother and child. I ſhall next, by comparing the value of the two lives,

placed

placed by lamentable neceſſity in competition, endeavour to prove, that our uſual practice of opening the child's head, and thereby leſſening its volume, ſo as to permit it to be extracted with the crotchet, inſtead of deſerving thoſe opprobrious and injurious terms, ſo unjuſtly applied to it by many foreign profeſſors, and ſome authors of this country, is infinitely preferable to any operation, which muſt at leaſt expoſe the mother to extreme danger, if not inevitable deſtruction.

I ſhall laſtly, endeavour to ſhew, and confirm by a late caſe, that a child at full maturity, and of the ordinary ſize, may, with its head opened,

be extracted by a crotchet, with perfect ſafety to the mother, through a much ſmaller, and more diſtorted pelvis, than has hitherto been ſuppoſed capable of admitting ſuch delivery; the pelvis in the caſe alluded to, being conſiderably ſmaller, than where the Cæſarian operation is invariably adviſed, and has been very often performed, and infinitely ſmaller, than where the diviſion of the ſymphyſis is even recommended. Thus I hope, almoſt to ſuperſede the neceſſity of the one operation, and altogether prevent the performance of the other.

In the ſecond part, where I give an hiſtorical detail of the diviſion of the ſymphyſis pubis, and the event

event of the caſes in which it has been performed, I have been obliged to make ſuch frequent and long quotations, as perhaps in the opinion of ſome readers, may require an apology, (while probably the greater number with myſelf, will think them the beſt and moſt important part of this eſſay), but the apology may be deemed more neceſſary, as I have departed from the uſual manner of throwing the quotations, in the form of notes, to the bottom of the page, and have introduced them into the body of the work. I beg leave however to obſerve on this occaſion, that the books from which I have taken my accounts are not very common, and the paſſages quoted are in general either

either curious, or important in matter, or expreſſion. It may be likewiſe neceſſary to ſtate, that as the books are all in Latin or French, languages univerſally underſtood, and indeed familiar to the medical reader, (for whom alone this work is intended), I have preferred the very words of the author, rather than a tranſlation, as precluding all miſrepreſentation or perverſion, and even the poſſibility of miſtake. By interweaving the quotation into the body of the work, the narration continues undiſturbed, and the confuſion and interruption of frequent and repeated references are entirely obviated.

It is impoſſible to enter upon the conſideration of the ſubject of

of this eſſay, without feeling, and lamenting the calamitous condition of the Sex, who at all times of parturition, are expoſed to the ſevereſt bodily pain, but who, in this caſe, are inevitably reduced to the cruelleſt alternative that imagination can conceive. An alternative, the more deplorable, as woman is the only created being who is ſubject to it, and the miſery of which is not produced by human vice, nor can it be prevented by human prudence; while the humbleſt of the ſex, therefore, have the ſtrongeſt and moſt complicated claim upon our benevolence and ſkill, the general welfare of ſociety calls for our beſt endeavours to leſſen the affliction; and let me hope, that the

the humanity, and uſefulneſs of the intention, will plead in extenuation of every fault, in the execution of ſuch an attempt.

ERRATA.

Page 3, note, line 2, for *perſpererunt*, read *perſpexerunt*.
P. 44, l. 3, for *who*, read *which*.
P. 64, l. 7, for *are*, read *were*.
P. 98, l. 7, for *ſcarce*, read *ſcarcely*.
P. 106, l. 2, after *favour*, add *of*.
P. 137, l. 17, for *adviſible*, read *adviſable*.
P. 145, l. 6, for *prothetically*, read *prophetically*.
7, for *clapſam*, read *elapſam*.
P. 149, l. 11, for *have*, read *has*.
P. 157, l. 15, for *præcepue*, read *præcipue*.
P. 175, l. 22, for *ligne*, read *lignes*.
P. 209, l. 4, for *cartillage*, read *cartilage*; and in different parts of the work, for *medicine*, read *medecine*.

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CHAPTER II.

ON THE DIVISION OF THE SYMPHYSIS PUBIS.

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The

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INTRODUCTION.

THOUGH the art and ſcience of midwifery, have been more cultivated throughout Europe, ſince the commencement of the preſent century, than during any preceding period, yet its progreſs has hitherto by no means correſponded with the importance of the ſubject, or our advances in other branches of the practice of medicine. This, I believe, may be accounted for in the following manner. Many ſenſible and well-informed perſons, and even

ſome philoſophers and phyſicians*, obſerving with what facility, and almoſt total exemption from danger, all animals in a ſtate of nature bring forth their young, have preſumed, from analogy, that human parturition, if conducted by nature alone, would be accompliſhed with equal facility and ſafety. From this opinion, which, for want of obſervation, is founded on a ſuperficial and imperfect knowledge of the ſubject, they have haſtily drawn concluſions unfavourable to the art of midwifery, and injurious to the intereſts of humanity; becauſe as far as their influence extends, they have a direct tendency to prevent or obſtruct all further improvements in this profeſſion, as unneceſſary and uſeleſs †.

To

* "Every other animal brings forth its young, without any aſſiſtance; but we think a midwife underſtands it better," &c.

See Dr. Gregory's Comparative View of the State and Faculties of Man, p. 22.

† "Artem obſtetriceam, futilem, inanem, imoque ut exitioſam habent viri cætera eruditiſſimi, "qui

To point out the fallacy of theſe opinions, and to obviate their influence, by demonſtrating the ſuperior difficulty and danger of human parturition;—to reſcue midwifery from the imputation of inutility, and to reſtore it to the importance which it merits, are the particular objects of this introduction.

That all animals in a ſtate of nature, bring forth their young with greater eaſe, and ſafety, than women, who are aſſiſted by art, is a fact incontrovertibly eſtabliſhed by general obſervation. If it cannot therefore be ſhewn, that this circumſtance ariſes from an eſſential difference between the ſtructure of the human body, and that of quadrupeds; and that human parturition, under the

" qui ea omnia ſceptic̃é negant quorum commoda ip-
" ſiſſimis occulis non perſpererunt;" as Monſ. Rouſſel de Vauzeſme obſerves even in France, where midwifery has been more attended to than in any country of Europe.

De Sectione Symphyſeos Oſſium Pubis admittenda. Auctore Auguſt. Rouſſel de Vauzeſme, Lutetiæ. Pariſ. 1778.

moſt favorable concurrence of circumſtances, or natural labour, muſt, of neceſſity, be more tedious, difficult, and painful, than the ſame operation in any other animal; the profeſſor of midwifery ought undoubtedly to acquieſce in the opinion referred to above, which conſiders his art as "uſeleſs, trifling, "and perhaps ſometimes hurtful."

But ſhould it, on the other hand, admit of demonſtration, that there is ſuch a powerful, and permanent cauſe inſeparably connected with, or rather dependent upon, the moſt perfect form and ſtructure of the human body, which clogs even natural parturition with many impediments: and if it can be further ſhewn, that there is a diſeaſe peculiar to the human ſpecies, which lays the foundation for innumerable difficulties and dangers in parturition, which are unknown in the quadruped; then the opinions, and concluſions I have mentioned above, will appear to be falſely or ſuperficially formed, and the charge of inutility muſt be rejected, as ill founded

and

and unjuſt. Indeed, it will be immediately evident, that midwifery, whilſt it profeſſes only to ſuperintend the act of parturition, to co-operate with nature, and to aſſiſt her when neceſſary, is an art extremely beneficial to mankind. But midwifery, in its moſt extenſive meaning, comprehends the medical direction and treatment of women from the beginning of the pregnant, to the concluſion of the puerperal ſtate, as well as the ſuperintendence of the act of child-bearing. If we therefore take into conſideration, the variety of painful, dangerous, and complicated ſituations and diſeaſes in which it affords relief: and if we eſtimate, as we ought, the high and peculiar importance of the ſubjects of this art, from their acknowledged conſequence to the happineſs of mankind, and even to the exiſtence of the world; we may ſurely venture to aſſert, that midwifery ought to be conſidered, not as a ſubordinate, but as one

of the moſt important parts of the medical art.

Having affirmed, that there is an eſſential difference between human parturition, and the ſame operation in every other female: it will firſt be neceſſary to deſcribe, in what that difference conſiſts; and then to ſhew, by what means it happens, that painful, difficult, dangerous, and even ſometimes fatal parturition ſhould be the unhappy lot of woman only, while all other creatures are in a great meaſure, if not altogether, exempt from every untoward circumſtance, which either accompanies or follows the act, and which conſtitutes the miſery of child-bearing.

If we admit, that human parturition was diſtinguiſhed by the ſeverity of its pains, by its difficulty and dangers, from the ſame operation in other animals, as a curſe annexed to the fallen nature of man; and that "in ſorrow "thou ſhalt bring forth children," was announced to our firſt parent as a puniſh-

niſhment, which, we are taught, it was the intention of the Deity ſhould continue to afflict human nature as long as the world endured—It will ſerve to illuſtrate one particular ſubject of this introduction, may gratify philoſophical curioſity, and at leaſt have a beneficial tendency*, if not be a matter of much practical utility, to enquire by what means peculiar to the human phyſiology, this great natural evil has been ſo compleatly effected, and muſt continue to be ſo inevitably annexed to the female body.

We are repeatedly told, from the higheſt authority, that "God made "man in his own image, and "after "his own likeneſs." Expreſſions, which, if not at all referrable to external ſhape, yet, as the God of nature has been pleaſed in his wiſdom and goodneſs, to give to the human ſpecies,

* "Iſta quoque naturæ rerum contemplatio, quam-"vis non faciat medicum, aptiorem tamen medicinæ "reddit." Celſ. lib. i. Præf. p. 14.

a form and poſition of body, differing from thoſe of all other animals, they muſt be underſtood to convey the moſt unequivocal mark of diſtinction and pre-eminence, over all orders of terreſtrial beings: and this peculiar form of body, the "*erectus ad ſidera vultus*," ought of courſe to be regarded as a tranſcendent benefit or bleſſing to human creatures. Notwithſtanding which, ſuch is the divine intention in the œconomy of this world, ſuch the imperfect ſtate of every ſublunary good, that certain inconveniences, neceſſarily reſult from, or are inſeparably attached to, every great advantage, or every acknowledged excellence. Thus the peculiar poſition of the human frame, that ſingular mark of pre-eminence, expoſes woman to pain and difficulty in natural parturition, from which the ſubordinate quadruped is almoſt entirely exempted, by the horizontal poſition of her body. The peculiar advantages of poſitions ſo different from each other, can no more

exiſt

exiſt in the ſame creature, than the ſtrength of the draft horſe and the fleetneſs of the racer, can be united in the ſame animal; as theſe depend on qualities incompatible with each other, and which cannot exiſt together in the ſame ſubject, ſo thoſe depend on circumſtances of ſtructure, or phyſical laws equally incompatible and inconſiſtent.

To underſtand how the erect poſition of body neceſſarily operates, in making natural labour in women more painful, tedious, and difficult, than in the quadruped, it is ſufficient to obſerve, that in ſuch a ſituation, there is the general and powerful influence of gravity conſtantly to counteract; in a certain degree, during the whole period, but in a much greater degree, towards the concluſion of utero-geſtation; for as geſtation advances, the ability in the ſoft parts to reſiſt the influence of gravity regularly decreaſes: and thus, if not prevented, premature labour would be the inevitable conſequence.

Com-

Compleatly to guard againſt this accident, which is of the laſt importance to the exiſtence of mankind, nature has taken peculiar pains, and attended to a variety of circumſtances in the ſtructure of the bodies, both of mother and child, which while they effectually anſwer the purpoſe intended, unavoidably create thoſe very obſtacles which delay and impede delivery. The moſt material of theſe circumſtances it may be proper to deſcribe.

Firſt then, that irregular cylindrical cavity in the ſkeleton, called the pelvis, through which the fœtus in all animals muſt paſs, is ſo placed in the human body, that its axis is very different from the axis of the trunk, and of courſe not perpendicular to the horizon, nor can any-thing therefore paſſing through it be within the immediate influence of gravity; at the ſame time, the axis of the pelvis is very remote from, if not directly oppoſite, to the axis both of the vagina, and os-externum, through which the fœtus muſt ultimately paſs.

Se-

Secondly. Upon the ſame principle and with the ſame view, nature has been obliged to vary, nicely and minutely, both the form and capacity of the pelvis, making it wide in one part, narrow in another, concave and deep behind, ſtraight and ſhallow before, and with ſides that converge to a conſiderable degree.

Thirdly. The upper and lower aperture of the pelvis do not at all correſpond in ſhape, and have directly oppoſite diameters. The ſuperior aperture or brim of the pelvis, where the child enters, is ovi-form*, with the long diameter extending from ſide to ſide. The inferior aperture, through which the child is to paſs out, is ſo irregular as not to admit of a compariſon, or illuſtration, from any known form, but is certainly ſhorter from one ſide to the other, than from the fore to the hind part; and that, nearly in the ſame proportion as it was lon-

* I only mean as having two different diameters.

ger

ger above: thus the two apertures have directly oppoſite diameters.

Fourthly. Purſuing the ſame intention, nature has made the volume of the child's head ſuch, compared with the cavity of the pelvis, that it cannot enter by its own weight, but requires the powerful and repeated contractions of the uterus and abdominal muſcles, and even then, the head muſt be of a particular form, and in a particular direction; that in the paſſage, both theſe neceſſarily undergo a material change from compreſſion, that the ſhape of the head may be all through adapted to the cavity of the pelvis; and thus it muſt conſequent-come out with an altered form, and in a different direction.

Laſtly. To add to the more effectual ſupport of the gravid uterus during geſtation, all the ſoft parts concerned in labour, are of a firm and rigid texture, dilating at all times with conſiderable, but the firſt time with extreme difficulty, to ſuch a degree, as to permit the paſſage

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of the child through them without laceration, or other injury. It is obvious that theſe circumſtances muſt render the act of child-bearing ſlow, difficult, and painful.

Let us now conſider the peculiarities of the quadruped, and their operation in labour.

By the horizontal poſition of the body of the quadruped, the parietes of the abdomen ſupport the gravid uterus during geſtation, in whatever ſituation the animal may be; the parts concerned in labour, cannot therefore at any time be expoſed to the general influence of gravity; on which account, nature was not required to obſerve ſuch ſtrict laws, or be attentive to ſuch minute deviations, reſpecting either the poſition, or capacity of the pelvis, the volume, or form of the head of the fœtus, the ſituation, or ſtructure of the ſoft parts. Therefore the ſame, or very nearly the ſame axis is given to the trunk, the pelvis, the vagina, and the os-externum; nature

ture has likewiſe made the head of the fœtus proportionably ſmall, compared with the capacity of the pelvis, ſo that it may readily paſs through in any direction; and the ſoft parts, having nothing to ſupport, are of a looſe texture, eaſily yielding to the firſt preſſure of the membranes, or fœtus, and of courſe affording little reſiſtance, and no impediment to delivery.

This difference in the ſtructure of the ſoft parts likewiſe ſatisfactorily explains, why the laceration of the perinœum, which, from inattention, or ignorance of the perſon attending, is no uncommon accident in human parturition, ſhould never happen to quadrupeds; a circumſtance which has been conſidered by ſome as a ſtrong proof of the ſuperiority of the powers of unaſſiſted nature, over all the care and exertions of art.

By this ſketch of human and comparitive parturition, it is evident, why the ſame operation under the moſt favourable circumſtances, or natural labour, muſt

in

in women be attended with much more pain, difficulty, and delay, than in any other creature. It remains now to be explained, why laborious parturition never did, or can occur to the quadruped.

It is well known, that the great and genuine cauſe of difficult and laborious births, is the deformity of the pelvis, or the diſproportion of its cavity to the volume of the child's head, and that this deformity is cauſed by a diſeaſe peculiar to the human ſpecies, called in infancy the Rachitis, and in the adult ſtate the Mollities oſſium; in both which caſes, there is ſuch a deficiency of earthy matter in the ſkeleton, as to render the bones inſufficient to ſupport the weight of the body, or ſometimes, the action of the muſcles. In the infantile diſeaſe, the ſecretion and lodgment of the earthy matter having never been effected, the formation of the bones is incompleat; in the adult ſtate, although the proceſs has been accompliſhed and the ſkeleton been perfectly formed, yet where firſt a ſolution,

tion, and afterwards an abſorption of this matter takes place, and it is conveyed by the urinary paſſage out of the body; and the bones in conſequence loſe their firmneſs and ſtability; in either caſe the effect is the ſame, and if the diſeaſe is general, to which there may be ſome, but I believe very rare exceptions, thoſe bones muſt ſuffer moſt, and firſt, which ſupport the greateſt weight, or are moſt expoſed to muſcular action. Now the part of the human ſkeleton, or ſingle bone*, which ſuſtains the greateſt weight, is the baſis of the os ſacrum, at its union with the laſt lumbar vertebra, for whether the body be walking, ſtanding, or ſitting, this part forms the baſe of the column, and muſt firſt give way, if the ſuperincumbent weight and preſ-

* I ſay ſingle bone, becauſe the whole pelvis is engaged in the ſupport of the trunk; and my friend, Dr. Denman, has very ingeniouſly deſcribed it as a double arch, admirably contrived by nature to ſupport the ſuperincumbent weight, and to give peculiar ſtrength to the human frame. See introduction to the practice of Midwifery, p. 29.

ſure

ſure be too great for the column to ſuſtain. This aſſertion is fully confirmed by anatomical obſervation. For, infinitely the greater proportion of deformed pelviſes are found, if not only, always moſt contracted at this part; an inconteſtible proof, that it firſt gives way, or is moſt under the influence of this diſeaſe, and when once affected, is with greater difficulty reſtored to its priſtine ſtate.

The Rachitis or mollities oſſium, ſo far as my obſervation extends, is a diſeaſe peculiar to the human body, to which quadrupeds, under no circumſtances, are ever ſubject; however, if they were, as from the horizontal poſition of their bodies, the pelvis ſuſtains little or no weight, ſo is that a part of their ſkeleton, which cannot be at all expoſed to the influence of this diſeaſe. Hence, as there is no ſuch thing as a deformed pelvis among quadrupeds, ſo there never can happen to them any of

thoſe difficulties or dangers, which, depending on deformity, conſtitute laborious parturition, to an almoſt endleſs variety of degrees in the human ſpecies.

From this deſcription, it muſt be obvious to every reader, that unleſs in the end or effect, ſcarce any analogy can with propriety be ſaid to exiſt in an operation, ſo widely differing as parturition does, in many of the moſt eſſential circumſtances. The opinions therefore, which have been haſtily adopted, and the concluſions, which have been ignorantly, or inconſiderately drawn from this ſuppoſed analogy, muſt appear to be abſolutely unwarrantable.

I cannot here refrain from obſerving, what may perhaps appear too obvious to require notice; that as the rickets is a diſeaſe very common in infancy, ſo the pelvis is very early, and frequently deformed; and for the reaſons ſtated above, long before the ſpine, or any other

other part of the ſkeleton, is really, or apparently affected. I believe, that when once the pelvis is much deranged, it is very rarely, and with great difficulty, again reſtored to its perfect form, and ſize; which is confirmed by frequent obſervation of women, who are both tall in ſtature, and well formed in the ſpine, and yet have the pelvis much contracted at its upper aperture. As it is of the firſt conſequence, ſo it requires our earlieſt and beſt endeavours, in female children, to check the progreſs of this diſeaſe, before the deformity be conſiderable, and long before it arrive at ſuch a degree, as to threaten that ſpecies of difficulty in delivery, which is the ſubject of the following eſſay.

To diſcriminate with preciſion the various degrees of deformity, and conſequently of difficulty, in laborious parturition, and to apply, in proper time, the means of art, beſt adapted to give relief in each, with ſafety both to mother, and

child, where the circumſtances of the caſe admit; but with an invariable preference to the mother, where the ſafety of both is incompatible, conſtitutes, the moſt important branch of the practice of midwifery. The life of the child, and the ſafety, health, and future comfort of the mother, very much, if not altogether depend in ſuch caſes, on the ſkill, and attention of the operator, and the timely application of his art; his profeſſional conduct therefore, is moſt intimately connected with the intereſts of humanity, and the welfare of the community.

I cannot therefore, I think, conclude this introduction more aptly, than by recommending to the ſerious conſideration of my young readers, Celſus's deſcription of the extreme difficulty and danger attending that degree of laborious parturition, which is the ſubject of the following eſſay, but particularly his conciſe deſcription of thoſe qualities in the operator, eſſentially required

quired to obviate the one, and prevent the other.

" QUÆ NUMERARI INTER DIEFICILLIMAS PO-
" TEST, NAM ET SUMMAM PRUDENTIAM, MODE-
" RATIONEMQUE DESIDERAT, ET MAXIMUM PERI-
" CULUM AFFERT." Celſ. lib. vii. cap. 29.

AN ESSAY ON LABORIOUS PARTURITION.

CHAPTER I.

SECTION I.

BY the general term of laborious parturition, we mean the protraction of a natural labour much beyond the uſual period, which is always attended with great difficulty, and ſome times with danger.

I have already in the introduction, endeavoured to explain why the volume

of the child naturally bears ſuch an exact proportion to the capacity of the pelvis, as that it can never enter, and paſs through that cavity, without conſiderable pain, and ſome difficulty, and if by any means, that due relation is interrupted, delay and danger muſt attend parturition to an endleſs variety of degrees.

To prevent, or remedy the preſent inconveniences, or future conſequences, ariſing from the inferior degrees of diſproportion, the head of the human fœtus, it is well known, is incompleatly oſſified at birth; nature having with admirable wiſdom, by means of ſutures and fontanelles, ſo conſtructed it, that in the paſſage through the pelvis, it may ſuffer the form to be altered, and the volume to be conſiderably diminiſhed, without ſuch injury to its contents, as ſhall neceſſarily deſtroy life. Yet as there is one volume, beyond which the fœtal head cannot ſuffer compreſſion with ſafety, ſo there is another and ſtill ſmaller volume, into which it can-

cannot be compreſſed at all, unleſs it be firſt opened, the contents diſcharged, and the bones by that means be permitted to collapſe.

Whenever the pelvis is ſo diſtorted in its form, and ſo contracted in its capacity, as not to permit the head of the child to paſs unopened, it conſtitutes that degree of laborious parturition, which is the particular ſubject of this eſſay. Paſſing by then the inferior degrees of difficulty, where either in the firſt inſtance, the powers of nature, though ſlowly, and with great and continued exertions, are yet ultimately equal to the accompliſhment of the delivery; and the next degree deſcribed by ſyſtematic writers, as requiring the aſſiſtance of the forceps, or vectis; by which the life of the child is capable of being preſerved; I will endeavour to aſcertain as accurately as the nature of the caſe renders practicable,

Firſt, What are the abſolute dimenſions of the pelvis, which in all caſes muſt

muſt inevitably require the head of the child to be opened, and its volume to be leſſened; or where, either the Cæſarian operation, or the diviſion of the ſymphyſis pubis muſt be performed.

Secondly, I will endeavour to aſcertain with the ſame degree of accuracy, founded upon principle, determinable by menſuration, and confirmed by a well known caſe, what are the ſmalleſt dimenſions of the pelvis through which a child can be extracted with a crotchet, when the head is thus opened, the contents diſcharged, and the bones collapſed.

The firſt, with a view to induce an early commencement of this operation when neceſſary; for upon that altogether depends the facility, and in a great degree, even the ſafety of the ſubſequent delivery.

The ſecond, with the intention of preventing the unneceſſary performance of the Cæſarian operation, but moſt eſpecially,

pecially, and in all caſes, to prevent the diviſion of the ſymphyſis pubis.

Though we can readily determine by the introduction of the fingers into the vagina, what are the abſolute dimenſions of the pelvis, yet the relation between theſe dimenſions and the volume of the child's head, is not determinable with geometrical preciſion; as there is a conſiderable variety in the ſize of the human fœtus, and it is impoſſible to know the exact ſize of any head while it remains in the uterus. Further; one head may perhaps, by its original conſtruction, be able to bear compreſſion better, or with leſs injury to the contents, than another head: various other circumſtances too, which cannot be known, probably ſometimes make a conſiderable difference; at leaſt it is an undoubted fact, confirmed by daily obſervation, that ſome children come alive into the world, while others are ſtill-born, and yet the circumſtances of the labour, and as far as we are able to judge, the ſtructure

both

both of mother and child, ſhall be apparently the ſame.

Notwithſtanding all theſe varieties; notwithſtanding the utter impoſſibility of arriving at abſolute preciſion; yet, we are certainly in poſſeſſion of the means of determining, with every degree of exactneſs neceſſary to direct our future practice, in the ſafeſt and beſt manner. Theſe means may be reduced to one point, determinable by menſuration, which is the more neceſſary, as I know of no author, even among the lateſt and beſt writers on this ſubject, who has yet done it with ſufficient accuracy and deciſion. All their expreſſions concerning the dimenſions of the pelvis, and the conſequent practice, are ſo vague, that they leave each reader to his own interpretation, either to determine the one, or direct the other*.

The weight of a new-born child, at full time, varies from rather leſs than ſix, to ten, and even at other

* See Smellie, Levret, Saxtorph, Roederer, &c.

times

times to twelve pounds; the ſize of the firſt being ſmall, of the laſt unuſually large†. The head of the child, the only part we are intereſted about on this occaſion, of courſe varies in equal proportion. By innumerable experiments accurately made, and I know, faithfully related, becauſe repeated by myſelf, the ſmall diameter of a child's head, or that which paſſes from one parietal bone to the other, meaſures at birth, from three inches and a half*, to upwards of four inches. One may therefore venture to pronounce, that the fœtal head, at full maturity, cannot bear compreſſion to a volume much ſmaller than three inches, from one parietal bone to the other, conſiſtently with ſafety to the child's life. Through a pelvis, which has its cavity naturally ſo contracted, or which is by diſeaſe ſo diſtorted in any part, as that

† See Roederer's Opuſcula, vol. I. p. 32. Diſſert. de Temporum, in Graviditate & partu, æſtimatione. Auctore J. F. G. Dietz.

* Burton, Windius, Camper.

the

the bones approach much nearer to each other than three inches, it is utterly impoſſible for a living child, at full maturity, by any means to paſs†.

To be preciſe; whenever a woman falls into labour, the ſmall diameter of whoſe pelvis meaſures only two inches and three quarters; one or other of the following circumſtances muſt take place.

Firſt, The child's head muſt be opened, and the contents diſcharged, that the bones may be permitted to collapſe; and the volume being thus diminiſhed, it may afterwards be extracted with the crotchet. Or,

Secondly, For the certain preſervation of the child's life, the mother muſt be doomed to inevitable deſtruction, by the Cæſarian operation. Or,

Thirdly, As a mean between the two extreams, the mother muſt ſubmit to the ſection or diviſion of the ſymphyſis

† Levret, Stein, Baudeloque.

pubis;

pubis; an operation certainly leſs dangerous to the parent, than the Cæſarian ſection, but at the ſame time, certainly leſs ſafe for the child. Or,

Laſtly, If none of theſe means will be permitted, the wretched mother, abandoned by art, to the excruciating and unavailing anguiſh of labour, will probably expire undelivered. An event, which, however extraordinary it may appear to us, in the improved ſtate of midwifery in this country, happened very lately to the wife of the heir apparent of the greateſt empire in the world*.

Deplorable as all theſe conditions are, we are compelled by neceſſity, in this caſe, to make our election of one or other of them. Such are the diſpenſations of Providence, and to them we muſt ſubmit.

Which of theſe operations is beſt entitled to our preference, when one of

* The Grand Ducheſs of Ruſſia.

them

them *muſt* be performed, I ſhall now endeavour to determine: with no other view, but the heartieſt and beſt intention to promote the intereſt of humanity; by ſhewing, that the fatal Cæſarian operation has in general heretofore, been moſt unneceſſarily performed, and by proving, that it may, almoſt always in future be prevented: but particularly, by demonſtrating the inconveniences and dangers attending it, endeavour to reſcue my country-women from a new, precarious, and I think, prepoſterous operation, which, originating in France, has unhappily extended over all the continent of Europe.

In this calamitous ſituation, perhaps the moſt miſerable for the unhappy individual, to which ſhe can be expoſed in this world ſo full of evils; we are reduced to ſubmit to that neceſſity, which every now and then occurs in all affairs of this ſublunary world, which ſuperſedes all other conſiderations, is irreſiſtable in its influence, and which, on this

oc-

caſion compels the phyſician to commit an act the moſt repugnant to human nature, while it ſubjects the wretched patient to the extreme of human miſery.

In this unhappy dilemma, where the two lives are abſolutely incompatible; where one being muſt be ſacrificed to the preſervation of the other; where either the mother or the child muſt be deſtroyed, or both together be expoſed to the extremeſt danger: to direct our conduct to the ſafety of the mother, as the firſt object; and to leſſen the painfulneſs of our own feelings, ariſing from a neceſſary call of duty, againſt which our very nature revolts—I will endeavour to make a fair eſtimate between the ſituation of the child in utero, and the unhappy parent; by comparing the value of life to the mother and to the child, and the value of each to ſociety; by comparing the loſs they muſt each ſuſtain by death, and the ſufferings each muſt neceſſarily incur from the violence inevitably preceding it.

By this enquiry, I truſt, it will evidently appear that the loſs of the principle of life to the child in utero, compared with the deprivation of actual life and the attendant miſery to the mother, is ſo incomparably ſmall on the compariſon, that it is diminiſhed almoſt to nothing, and affords the moſt irrefragable argument in favour of the delivery by the crotchet in preference to either of the other methods.

Whatever reaſoning is intended to have this effect, cannot be unacceptable either to the phyſician or the patient, as tending to reconcile him to the moſt painful profeſſional duty, and tending to ſupport and conſole her, in the moſt afflicting ſituation of life. For this purpoſe, I beg leave to ſubmit the following conſiderations, to the ſerious attention of my readers.

SECTION

SECTION II.

THAT this life was intended by the Deity as a bleſſing, and that in general it proves ſuch to the poſſeſſor, cannot be denied, without arraigning one of his firſt attributes, and violating the general ſentiment of mankind.

Yet ſo precarious and unſtable are the comforts of this world, that philoſophers in all ages, and in all countries, have, from obſervation expreſſed their doubt, whether life at any period, may be reaſonably expected to prove a future bleſſing to the poſſeſſor; and particularly, one of the wiſeſt, moſt enlightened, and celebrated characters of antiquity has declared, that no human creature can determine, "utrum "vivere an mori ſit melius, dii immortales

" ſciunt, hominem quidem ſcire arbitror " neminem*."

If this be a true and correct idea of life, if its enjoyments and miſeries are ſo blended together, that with all the relations and accompanying pleaſures, which though not pure, make up the ſum of human felicity; it remains to be determined, whether it be better at any time to live, or die; ſurely the deſtruction of the living principle before birth, the mere prevention of exiſtence, or the deprivation only of a poſſibility of life, ought to be conſidered as a loſs inexpreſſibly trivial.

A being in the uterine ſtate of exiſtence, ſuſtains no immediate loſs by the deprivation of the living principle, and can ſcarcely be ſaid to incur any other poſitive injury. Before the operation, the child in utero cannot ſuffer mental anxiety, or apprehenſion from the threatened violence; nor does it

* Cicero. I. Tuſcul. Quæſt. de contemnenda morté.

feel,

feel, I am perſuaded, the ſmalleſt bodily pain in the actual commiſſion even of ſuch violence. Though it be not correctly true, as Shakeſpeare * ſays, that

" The ſenſe of death is moſt in apprehenſion:"

and though it be ſtill leſs true, as he afterwards finely and emphatically expreſſes himſelf, in the following deſcription;

" The wearieſt and moſt loathed worldly life,
" That age, ach, penury, and impriſonment
" Can lay on nature, is a *paradiſe*
" *To what we fear of death:*"

yet it is certainly from that apprehenſion, combined with thoſe other circumſtances of miſery, which uſually precede and accompany the act of dying, that death itſelf can be conſidered as the greateſt of human evils—and from every one of thoſe, the child in utero is entirely exempt.

But we are accuſtomed in common language, to ſpeak with the ſame fami-

* Meaſure for Meaſure, Act III.

liarity of a living child in utero, as diſtinguiſhing it from a dead one, as if children before birth, actually poſſeſſed the properties of life, and were ſuſceptible of the ſame impreſſions from external violence; inſomuch, that it is not eaſy to perſuade ourſelves, or by any arguments perſuade others, to entertain a contrary opinion. Thus the idea of cruelty to beings in ſo helpleſs a ſituation is highly aggravated, and makes even a deeper impreſſion upon our feelings, than perhaps the ſame treatment after birth, when the ſufferings would be real and extreme. Thus, "The *Petition of the unborn Babes*" was the quaint title of a popular pamphlet, publiſhed ſome years ago by an ingenious phyſician, who had taken up moſt unjuſt, and therefore moſt inexcuſable prejudices againſt the art of midwifery; and who endeavoured to fix on it an indelible ſtain of barbarity, by making the unborn children pathetically complain, of the ſeverity, and

cruelty

cruelty of their treatment: by that means the author hoped, compleatly to ruin it in the opinion of the world; as if any motives could poſſibly urge the practitioners of midwifery, to commit wanton acts of cruelty upon an unborn child!

But as children before birth are incapable of mental apprehenſion, ſo it is as undoubtedly true, that they are not yet arrived at, or in poſſeſſion of bodily ſenſation, and cannot therefore ſuffer pain, or become objects of cruelty.

That they cannot ſuffer from mental apprehenſion is notorious to general obſervation. Even years elapſe after birth, before the mind is ſuſceptible of fear, or apprehenſive of danger. But though it is generally acknowledged, that bodily ſenſation is very imperfect and obſcure before birth, it may require ſome convincing proof that it does not exiſt at all in that ſtate, before it will be univerſally allowed. A ſtrong preſumption that ſuch however is the ſtate of

the caſe, ariſes from this obſervation, that although children do often die in utero, yet the mother never can diſcover by her feelings when death takes place there. The diſeaſe of which the child dies, and the act of dying, are equally unknown, and unnoticed by her. The ceſſation of the accuſtomed motion, is the firſt, and for ſome time, the only difference obſervable by the mother, between the life and death of the child in utero.

Diſeaſes which at any period, attack the human body poſſeſſing ſenſation, with ſufficient force to deſtroy life, are in general attended with ſuch a degree of pain, as to excite extraordinary motion, and ſome ſtruggle; at leaſt in articulo mortis. It is highly improbable, that theſe ſhould take place in the uterus, and the mother be inſenſible of their effect. It may, however, be barely poſſible, that the only diſeaſes of which the unborn child is ſuſceptible, are not of the painful kind. Gradual de-

debility, it may perhaps be ſaid, is the only effect of thoſe means, which nature uſes, to deſtroy the principle of life in utero, and ſuch a change would be imperceptible to the mother.

This conjecture therefore, may not be conſidered as ſufficient evidence, however preſumable, that the child is not yet arrived at bodily ſenſation, before birth takes place. But the following obſervation I think, muſt be eſteemed inconteſtible evidence of the truth of the aſſertion.

When we are compelled by dreadful neceſſity, to open the child's head while we know it is yet living in utero, that operation requires ſuch extreme and painful violence, that, were the child endowed with the ſlighteſt ſenſation, he muſt of neceſſity feel it; and his feeling muſt neceſſarily be accompanied with ſuch ſtruggles and exertions, as would be emphatically expreſſive of pain, and muſt be readily perceived by the mother, in a part ſo ſenſible, and irritable as the uterus.

Upon

Upon accurate and repeated enquiry in ſeveral ſuch caſes, I could never learn, that the mother was ſenſible of any ſuch alteration in the motion of the child, even at the commencement of the operation, when the violence offered to it firſt takes place, and muſt be moſt painful. We are therefore, I think, warranted in the concluſion, that no ſenſation whatever does exiſt at that time; and that no cruelty, or barbarity, can be ſaid to be committed upon a being abſolutely without feeling.

Having proved, that the loſs which the child ſuſtains by the deprivation of the principle of life, is ſo extremely ſmall as almoſt to vaniſh to nothing, and that its bodily ſufferings in the act of deprivation are abſolutely none; it becomes proper, next to enquire, what is the value of an unborn child to its parents, and to the community.

Before the birth of the child, parental affection has not taken place, which,

which, for the wiſeſt and beſt purpoſes is one of the ſtrongeſt, the moſt univerſal, and perhaps the moſt uncontroulable paſſions of the female breaſt; often changing, even in the ſubordinate parts of the creation, the very nature of a timid mother, into that of a ferocious animal. Diſappointment of expected pleaſure only, not the loſs of an object of this powerful paſſion, or the loſs of any actual enjoyment, is the ſacrifice, the unhappy parent makes on this occaſion.

Had parental affection commenced at the time of conception, or when the embryo is firſt formed; and had it continued increaſing during geſtation, as the fœtus advanced in growth; by the time of birth, the paſſion would have been mature, and its influence moſt powerful, and the mother's other ſufferings would have been greatly aggravated by the loſs of a beloved child. But as ſuch a paſſion could be directed

to

to no uſeful purpoſe, during the exiſtence of the child in the uterus, nature, who never performs works of ſupererogation, either in the phyſical or moral world, has not yet kindled it in the mother's breaſt: It begins only with birth; and parents in general may, I think, be literally ſaid to ſuffer nothing, by the loſs of an unborn child.

In the caſe of wealthy and noble families, this loſs is in particular inſtances acutely felt, but the ſenſation is not ſo truly parental as we may ſuppoſe. It is not ſo much the loſs of a *child*, which they regret, as the want of an *heir* and *repreſentative*; if ſorrow be blended with diſappointment, the latter ſtill predominates.

To ſociety likewiſe, the loſs of any individual child, muſt be exceedingly ſmall, when it is known by daily obſervation, what great numbers of children are ſtill-born, or die without ſuch violence before birth; when it is likewiſe

wiſe known, how very precarious is the chance of a child's living two years; but how moſt of all precarious, is its arrival at that period of life, when it can be of any ſervice to his fellow-creatures, or even participate itſelf in the enjoyments of the world.

In eſtimating the value of the life of the unborn child at ſo low a rate, I *moſt earneſtly* requeſt, that the medical reader will never loſe ſight, that it is only in compariſon with the mother, or when the child's life is put in competition with her ſafety, that any arguments on this ſcore are entitled to the ſmalleſt weight. It is for the preſervation of the mother's life only, that we can juſtify the practice here recommended and inſiſted on.

But when that object is to be gained, and by dire neceſſity can be gained by no milder means, it requires only a very ſhort comparative deſcription of the mother's ſituation, with the preceding account of the child, to demonſtrate the pre-

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ference due to her ſafety. While the unborn child ſuffers neither in body or mind, as has been proved above, from the violence which deſtroys his exiſtence in utero—the unhappy mother's ſufferings to ſpare and preſerve that child, muſt be extreme in both—dreadful even in apprehenſion to a timid woman, whoſe imagination is ever active in anticipating evil, but moſt dreadful in the immediate and actual ſufferance, either from the Cæſarian ſection, or the diviſion of the ſymphyſis; then; after either of theſe tremendous operations, a train of grievous ſymptoms follow, which precede death infallibly in one caſe, and too often in the other. While the loſs of the unborn child too, as juſt deſcribed, is extremely ſmall to itſelf, to its parents, and to the community; the mother, being probably connected by all the deareſt relations, as friend and daughter, ſiſter and wife; her death muſt to ſociety at large be a conſiderable, and to many individuals pro-

probably an irreparable loſs. With theſe circumſtances in our view, the loſs of an unborn child becomes ſo inconſiderable, as almoſt to exclude the poſſibility of compariſon.

This comparative eſtimate of the value of the two lives, and the practice recommended in conſequence, receives likewiſe the ſtrongeſt confirmation and ſanction, from popular opinion and ſentiment; which in this caſe ought to direct our conduct, becauſe from them there lies no appeal. It is the intereſts of mankind at large we are ſolicitous to promote; it is their feelings alone we are anxious to gratify. Inſtead therefore of thoſe opprobrious epithets applied by ignorant or intereſted perſons to this practice, infinite credit, in my opinion, is due to the practitioners of midwifery, for their fortitude in this trying ſituation; a ſituation, which of all others, requires the firmeſt reſolution to act; for the action we are by

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neceſſity compelled to do, is in direct violation of all our fineſt feelings; and in my opinion, no worldly reward can compenſate for the pain we ſuffer, and the ſacrifice we make, by this unhappy, but indiſpenſible call of duty.

SECTION

SECTION III.

I HAVE been induced in the preceding ſection, to dwell the longer on this part of my ſubject, becauſe, though I am aware that the practice inſiſted on, is common in this country, yet it has always been avowed with reluctance, and performed with heſitation; and therefore, I am convinced, it has been in many inſtances moſt unmeaningly, and what is infinitely worſe, moſt injurioufly delayed.

The ancient authors deſcribe it as only to take place when the child is already dead in utero; and all the lateſt foreign writers concur with the ancients, and to intimidate the practitioner, brand it with the moſt opprobrious, and even criminal epithets*, and recommend in pre-

* See Crantz, Weidmann, &c. &c. one calling it Homicidium; another, Facinus nefandum, &c. But a late writer in our own country has ventured a ſtep

preference, during the life of the child, every other method however dangerous to the mother. Even in the preſent practice of this country, to ſoothe our feelings, we always wiſh to perſuade ourſelves that the child is actually dead, before we attempt to leſſen the head, and deliver with the crotchet. This conduct is founded on a ſtrong natural ſentiment, and is in the firſt effect, innocent, and therefore excuſable; but in hope and expectation, that the child *may* die before it is abſolutely neceſſary to perform this operation, we are often induced, I am afraid, to wait much longer than is conſiſtent with the mother's ſafety; and then, ſhockingly to humanity, and diſgracefully to the profeſſion, both parent and child, are involved in one common death.

I have been much miſinformed, if upon this ground, and to gratify the ſcrupulous feelings, or miſtaken prin-

further; I truſt however, without being aware of the force of the Engliſh word, for ſpeaking on this ſubject, he ſays, "by the horrid, (and 'tis to be "feared, ſometimes *murderous*) expedient," &c.

See Aitkin's Elements of Surgery, p. 389.

ciples,

ciples, of otherwiſe able, and worthy men, many valuable women have not loſt their lives in this country, and even in this city.

Profeſſional duty ought to be ſuperior to all our feelings, whenever they interfere with each other. Neceſſity, (nay, even honeſty!) in this caſe, will not admit the practitioner to indulge himſelf in thoſe feelings moſt grateful, becauſe moſt flattering to the human heart; they muſt be ſacrificed to his duty, or he is moſt unfit for his profeſſion: and whatever his general knowledge and ſkill may be, his practice in this caſe, will often be fatal to his patient, and of courſe highly injurious to ſociety.

I am convinced, that this is not the only part of the common practice of midwifery, in this country, where we have been long and much to blame, by delaying the operative delivery, whether manual, or inſtrumental, when needful, too late. An opinion has been taught, from great authority,

which has of late pretty univerſally prevailed throughout this country, that nature is all-powerful in parturition; that there is no putting limits to, or circumſcribing her abilities; and that the interference of art, while thoſe abilities are in vigour, is in all caſes injudicious, and dangerous.

This opinion, has probably in part ariſen, from that miſtaken analogy in parturition, the influence of which I have endeavoured to obviate in the introduction to this eſſay; partly from natural timidity of diſpoſition, from indeciſion, and from indolence or reluctance of action; but chiefly I believe, from early and deep impreſſions of the miſchievous effects of raſhneſs, without ſufficiently adverting to the dangerous conſequences of procraſtination. Wherever, or however this opinion may have originated, it has been extended, as obſerved above, to a moſt blamable degree; for though as a general poſition, it is incontrovertibly true, yet it has

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ſo many exceptions, and is in ſo many inſtances falſe in fact, and fatal in conſequence, by preventing in critical ſituations, the timely recourſe to art, that its influence ought to be corrected, or reſtrained, and its application to practice very cautiouſly adopted.

I hope it may be permitted in illuſtration, to make a further digreſſion, and requeſt the attention of my readers to the following obvious circumſtance. No poſition in practical midwifery is more univerſally true, than that the powers of nature, are equal to the expulſion of the placenta, and that in common it may, with perfect ſafety, be truſted to the operation of thoſe powers; yet the extenſion of that poſition to general practice has, in innumerable inſtances, produced the moſt dangerous, and in ſeveral recent caſes, the moſt fatal conſequences. And here I will venture to appeal for confirmation, both of the effects of the general doctrine, and of the particular illuſtration, to many of

the moſt reſpectable and experienced practitioners in this city.

In that preciſe degree of laborious parturition, which is the ſubject of this diſſertation; to check, or prevent the dangerous operation of an opinion or principles, ſo conformable to our obſervation of the admirable wiſdom of nature, in all her other works; and ſo agreeable to our own inclination, and which are therefore ſo apt to impoſe upon our judgement; I will beg leave to revert to the conſideration of the firſt practical poſition in this eſſay, viz. "the inevi- "table neceſſity of leſſening the vo- "lume of the child's head, in certain "dimenſions of the pelvis*, with a "view to induce and urge an early "commencement of the operation;" for upon the timely performance of the firſt ſtage of this buſineſs, in a great degree, depend the facility, ſafety, and efficacy of the ſubſequent delivery; the

* See page 26.

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delaying the commencement too long, is therefore in fact to deprive it of all future benefit, or at leaſt to render that ſucceſs precarious, which might otherwiſe have been infallible.

When once the neceſſity of this practice is eſtabliſhed, by the acknowledged dimenſions of the pelvis, as preciſely aſcertained in a former part of this eſſay †; then, in all the different degrees of deformity abſolutely requiring the child's head to be leſſened, great inconveniences, without a poſſibility of benefit, may happen from procraſtination, while infinite advantages will enſue from the early commencement of the operation.

Thus for example, if the pelvis meaſures two inches and upwards, to leſs than three inches, from pubis to ſacrum, and the head be opened in the beginning of labour, and the cerebrum diſcharged; by the collapſion of the

† See page 30.

bones, the volume of the head will be ſo much reduced, as in all probability to admit in time, of being forced into the pelvis by the powers of nature; by which means the application of the crothet may perhaps, be altogether avoided; at leaſt, the danger attending the uſe of that inſtrument, while the head lies remotely above the brim, will certainly be prevented. A circumſtance, of great conſequence towards infallibly inſuring the perfect ſafety of the patient in this operation. But if the pelvis is ſo contracted, as only to meaſure from one inch and a half, to rather more than two inches; there can be no reaſonable expectation, or even poſſibility, that the head of a child at full maturity ſhould, by the pains of labour, be forced into the pelvis without the aſſiſtance of the crotchet: notwithſtanding which, great advantages will be gained by the early opening of the head, for putrefaction will be ſooner, and more complete, the child's body of courſe will become ſof-

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ter and more compreſſible, the union of the bones will be much looſened, and the ſubſequent extraction will be infinitely eaſier to the operator, and proportionably ſafer for the patient. Thus in all poſſible caſes, and in all points of view, the commencement of the operation cannot be undertaken too early, wherever the cavity of the pelvis is within the ſtipulated dimenſions, and the neceſſity of the operation is completely eſtabliſhed by deliberate enquiry, and if poſſible, confirmed by conſultation.

Having, I preſume, ſatisfactorily proved the neceſſity and propriety of opening the head of the child, at the beginning of labour, whenever the capacity of the pelvis is only two inches and three quarters, or certainly leſs than three inches, from the utter impoſſibility of a child of ordinary ſize at full time, being born alive by any means, either of nature or art, through ſo ſmall a pelvis.

It

It will here naturally occur to the inquiſitive reader, to inquire, whether it is not often neceſſary to open the head of the child, when the dimenſions of the pelvis are conſiderably larger than thoſe ſtated above, as invariably requiring this operation? To which I beg leave to anſwer, that it certainly is; but it does not come within the intention of this eſſay, to conſider at large any other than thoſe dimenſions, which abſolutely, and of themſelves demand this, or one or other of the ſpecified operations. The neceſſity of the caſe depends here, upon the extraordinary ſize of the child; and I will only juſt obſerve, that as it is impoſſible to determine the abſolute volume of any head, while it remains in the uterus, ſo we can only be directed in our conduct, by the inability of the powers of nature to force the head into the pelvis; and we ought on no account therefore, to have recourſe to this dreadful operation, till thoſe powers are exhauſted, or the mother's life

life ſeems to be threatened with danger from further delay. No preciſe rule can be preſcribed in this caſe; it muſt be truſted to the ſagacity, the diſcretion, and the good ſenſe of the operator, and the aſſiſtance of a conſultation, which in this ſituation, ought never to be diſpenſed with. The event in this caſe, however, may always be reaſonably expected to prove favorable to the mother, unleſs the labour has been protracted much beyond the limits preſcribed by general practice; becauſe, in a pelvis of ſuch dimenſions, the delivery, when once determined, can always be eaſily, ſpeedily, and of courſe ſafely accompliſhed.

Having, I truſt, in the ſecond ſection, by the comparative eſtimate of the value of the two lives, placed in competition, ſatisfied the moſt ſcrupulous, of the propriety, of never expoſing the valuable life of a mother to abſolute deſtruction by the Cæſarian operation, for the certain ſafety of the child; or to imminent danger by the diviſion of the ſymphyſis, for a mere chance

of

of preſerving the child. Having, I hope, equally ſatisfied the moſt diffident and timid, of the impropriety of that unmeaning delay which, while it unneceſſarily expoſes the unhappy woman to excruciating torture at preſent, equally enhances her future danger without a poſſibility of benefit; the other queſtion which I propoſed to examine and endeavour to determine, and which ſtill remains to be conſidered, is, what are the ſmalleſt poſſible dimenſions of the pelvis, through which a child with its head opened, can certainly be extracted with ſafety to the mother, by means of the crotchet?

As no author has deſcribed the former queſtion with ſufficient accuracy and deciſion, infallibly to direct us in firſt opening the head, ſo I know of none, who has even attempted upon ſure principles to aſcertain the latter.

I will therefore now endeavour in a few words to determine it, with every degree of exactneſs neceſſary or uſeful

to

to direct our conduct in future; a point in practice, that may be as essentially necessary to be settled, previous to the commencement of the operation, as even the determination of the first dimensions requiring the use of the crotchet; for otherwise, the head may be unnecessarily opened, and the child's life wantonly destroyed, without ensuring safety to the mother; for we may not be able to extract the child through the natural passage, even after the head has been lessened. In which case, we shall be ultimately compelled to have recourse to the section of the symphysis pubis, or the Cæsarian operation, without the possibility of any equivalent.

SECTION

SECTION IV.

IT is well known to the experienced reader, and will be confirmed by Elizabeth Sherwood's caſe, to be related by and by, that after the head of the child is once opened, all the bones, except thoſe making up what is called the baſis of the cranium, may eaſily be broken or deſtroyed with the crotchet, and extracted, bit by bit, with a pair of ſmall forceps. The whole of the parietal and frontal bones may be thus readily and eaſily removed: but the baſis of the cranium, in that caſe, abſolutely reſiſted all the force I was poſſeſſed of, or dared to employ. I could not break it, and extract it piecemeal, as I had done the other bones; and I was fearful of being foiled in the completion of the

the delivery, till I thought of changing the poſition of the head, by turning it ſideways, for by that means the volume was very conſiderably diminiſhed: but though it was then comparatively eaſy, it ſtill required conſiderable exertions to bring it in that ſituation through the upper aperture or moſt contracted part of the pelvis.

From the event of this caſe, I concluded, that whatever pelvis would admit the baſis of a fœtal cranium turned ſideways, to enter and paſs through, would be always ſufficiently capacious to admit of this mode of delivery, and preclude the Cæſarian operation. To determine this point; the firſt thing needful was, to aſcertain the width of the baſis of the fœtal cranium, when all the upper part of the head is removed. I therefore examined a great number of children's heads, who died immediately in, or near the time of birth, and found but the ſmalleſt poſſible variety in the volume of the bones making up the baſis

ſis of the cranium, when it is turned ſideways; for meaſuring theſe bones in that ſtate, I found that they never exceeded one inch and a half in width; indeed, they ſeldom meaſured quite ſo much, after the frontal and parietal bones are removed. Whenever there is a ſpace from pubis to ſacrum, or from the fore to the hind part of the upper aperture of the pelvis, equal to an inch and half, I am convinced it will be always practicable to extract a child by a crotchet, after the head has been ſome time opened, and the texture of the child's body is ſoftened by putrefaction, (as recommended above), and the whole of the parietal and frontal bones are picked away; and that,—with tolerable facility to the operator, and perfect ſafety to the patient.

The manner of performing the operation is ſo eaſy, and in general ſo well underſtood, that I do not think it neceſſary to enter into any formal deſcription of the manner of doing it, or

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give a tedious and minute detail of what may be found in every ſyſtem of midwifery, from la Motte, who firſt deſcribes and recommends it, to Smellie, and all the later authors; and to do which with ſafety, every perſon is inſtructed in his earlieſt ſtudies. But it is eſpecially leſs neceſſary in this eſſay, becauſe in the caſe annexed, I ſhall be as minutely attentive in deſcribing every important circumſtance, which related to the ultimate delivery, as I purpoſe in the firſt part to be in aſcertaining the dimenſions of the pelvis, previous to the commencement of the operation. That the caſe altogether, may afford (as far as any ſingle caſe can) a demonſtration of the poſſibility of bringing a child at full time, and of the ordinary ſize, through a much ſmaller pelvis, than has been uſually ſuppoſed by practitioners, or deſcribed by authors, as admitting ſuch a mode of delivery; and likewiſe, that it is practicable with perfect ſafety to the mother,

by ordinary ſkill, and ordinary attention.

Thus, the Cæſarian operation may with certainty be avoided, in all dimenſions greater than thoſe above deſcribed; or in other words, it is never abſolutely neceſſary where the ſmall diameter from pubis to ſacrum, meaſures completely one inch and a half. Or (which is not unuſual) where there is a ſpace equal to that width on either ſide the projecting ſacrum. Dimenſions much ſmaller than where that operation has been moſt generally performed, and infinitely ſmaller than where it is invariably required by all the beſt writers on this ſubject*.

I cannot conclude without enforcing in the ſtrongeſt terms the neceſſity of opening the head of the child in the very beginning of labour, thereby to induce as ſpeedy, and compleat a ſtate of putrefaction as is poſſible, for by that means

* See Levret, Simon, Stein, Roederer, Saxtorph, Baudeloque, Crantz, Weidmann, &c.

(let

(let me entreat permiſſion to repeat it again,) the union of the child's bones will be looſened, and the whole body reduced to a more compreſſible ſtate, affording leſs reſiſtance, and requiring leſs violence, and of courſe expoſing the mother to leſs danger of injury. I am perſuaded, not only the ſafety, but even the practicability of extraction, will in a very ſmall pelvis, depend on an attention to this circumſtance.

That the young practitioner may be directed in all circumſtances, which admit and require preciſion, I would recommend the delaying all attempts to extract the child, till the head has been opened, at leaſt thirty hours. A period of time ſufficient to compleat the putrefaction of the child's body, and yet not ſufficient to produce any danger to the mother; at leaſt the beneficial effects, of facilitating the extraction of the child, I a mfirmly convinced by frequent experience, will much over ballance any poſſible injury, which may reaſonably be ex-

pected, from the putrid ſtate of the child, and ſecundines, in ſo ſhort a time.

The propriety however of this delay, entirely depends upon the head's being opened, in the beginning of labour; for if we do not perform the firſt part of this operation, till the labour has been protracted ſo long, as that the woman's ſtrength begins to fail, we muſt expedite the delivery as ſpeedily as poſſible, otherwiſe the danger we wiſh to avoid, will infallibly be incurred—No woman can ſuffer continued labour beyond a certain period, without fever, inflammation, and the moſt imminent danger, if not death enſuing.

In the uſe of the crotchet, I muſt beg leave to recommend the introduction of that inſtrument into the cavity of the cranium, and the fixing it upon ſome part of the ſolid bones, which compoſe the baſis; by which means a firmer purchaſe will be procured, it will be leſs likely to ſlip, and if it ſhould ſlip, there will be leſs probability of its injuring the ſoft parts.

parts. This internal application of the inſtrument, is obviouſly ſo much ſafer on all accounts, that I ſhould not have thought it demanded notice, had not the laſt author, who has written on the ſubject of midwifery in this country, expreſsly recommended the crotchet, to be applied "ſome where on the out-"ſide of the cranium*."

I muſt likewiſe beg leave earneſtly to recommend, as it may eventually be of great importance, to keep one hand conſtantly in the vagina, while the extraction with the crotchet is performing, for by that means we ſhall always be more cautious in the quantum, and direction of the force neceſſary to be employed; and what is moſt particularly to be guarded againſt, we ſhall by that means, certainly prevent any injury to the rectum, from the point of the crotchet, if it ſhould by any means, unfortunately ſlip its hold.

* See Hamilton's elements of the practice of midwifery, p. 192.

For although the hand which is between the rectum and the inſtrument, may in that caſe be hurt, yet it muſt infallibly defend the rectum from being wounded; an accident which might otherwiſe eaſily happen, and which is an object of infinite conſequence to be prevented; for the future comfort of the unhappy patient, will much depend upon ſuch prevention; too great care or caution, cannot therefore be exerted to guard againſt ſuch an accident, and the means recommended is obviouſly infallible.

This is a circumſtance, which has not eſcaped the acute Celſus, in his deſcription of this operation, who expreſsly mentions it, though not only, or preciſely with the ſame intention, "Trahere "autem dextra manus uncum, *ſiniſtra* "*intus poſita*," &c. and which he ſuppoſes the more neceſſary, when the body being putrid, the inſtrument may be apt to ſlip—"Nam uncus injectus pu-"tri corpuſculo facile elabitur, in quo

"quid

" quid periculi ſit, ſupra poſitum," which danger he had before ſtated in the following manner, " unci acumen " in ipſum os vulvæ delabitur, ſequi- " turque nervorum diſtentio, & ingens " periculum mortis;" and to avoid the danger which may enſue from this accident, he recommends the operation to be done ſlowly, and with intervals, " leneter trahere oportet; & per has " occaſiones paulatim eum educere." He begins the chapter upon this ſubject, with ſaying that it is among " the moſt " difficult, and dangerous operations, and " that it requires *conſummate ſkill*, and " *the utmoſt caution* in the performance:" The whole chapter may be conſidered as a commentary on that poſition, and which I will beg leave again, earneſtly to recommend to the attentive peruſal of my young readers, as I have already once done at the end of the introduction. For although near two thouſand years have

elapſed ſince Celſus lived at Rome, there is not perhaps, a better diſſertation extant, upon this ſubject, either in point of compoſition, or matter. He concludes it, by recommending ſuch treatment, as conveys a ſtrong impreſſion of the danger of the caſe, according to his opinion, and the neceſſity of great attention in the ſubſequent management of the patient; and which, is one among innumerable inſtances of the accurate obſervation of the antients, in the deſcription, and compariſon of the different morbid ſtates of body, produced by different cauſes. "Reliqua "curatio talis eſſe debet qualis in in- "flammationibus, & in his vulneribus, "quæ *in nervoſis locis* ſunt, adhi- "betur*."

I will beg leave now to preſent the caſe, repeatedly mentioned in the preceding eſſay, in confirmation of the poſſibility of the doctrine inſiſted on.

* Celſ. lib. 7. cap. 29.

SECTION

SECTION V.

CASE.

ELIZABETH SHERWOOD, the ſubject of the following caſe, was from early infancy, by her mother's information, of an infirm weakly conſtitution, and of a ricketty habit; which continuing for many years, ſhe was ſo much ſtunted in her growth, as never to meaſure more than forty-two inches in height. She was at the ſame time ſo extremely deformed, both in her ſpine and lower extremities, as never to be able to ſtand erect for one minute, without the aſſiſtance of a crutch under each arm. At the age of twenty-ſeven years, ſhe, however, became with child,

and

and was admitted a patient into the Store Street Hoſpital.

Early on Sunday morning, November the 19th, 1776, ſhe came into the houſe, complained of having been in pain the two preceding days, and nights, ſo as to have had very little ſleep. I examined her per vaginam that evening, with great attention, and as her pelvis was ſingularly diſtorted, and the capacity very much contracted, it will be right to diſcribe the reſult of that examination, with every poſſible degree of accuracy.

Immediately upon the introduction of the finger, I perceived a tumour equal in ſize, and not very unlike in the feel to a child's head. However it was inſtantly diſcovered, that this tumour was formed by the baſis of the os ſacrum, and laſt lumbar vertebra, which projecting into the cavity of the pelvis, at the brim, barely left room for one finger to paſs between it, and the ſymphyſis pubis; ſo that the ſpace from bone to bone,

bone, at that part, could not exceed three quarters of an inch. On the left ſide of the projection, quite to the illeum, which was about two inches and a half in length, the ſpace was certainly not wider, by ſome of the gentlemen, who examined her afterwards, it was thought to be rather narrower. On the right ſide, the aperture was rather more than two inches in length, from the protuberance to the illeum, and as it admitted the points of three fingers (lapping over each other) in the wideſt part, it might at the utmoſt be about one inch and three quarters, from the hind to the fore part; but it became gradually narrower, both towards the illeum, and towards the projection.

The os uteri although but little dilated, was ſoft, and flabby, as it uſually is on the approach, or in the beginning of labour. The membranes were not yet broke, but with ſome difficulty I perceived the child's head through them,

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ſituated very high above the projection. The tumour of the uterus extended to the ſcrobiculus cordis, and was of the uſual ſize at the complete term of utero geſtation. The abdomen was hard and tender. As ſhe ſeemed much fatigued for want of reſt, fifteen drops of tinct. thebaica was given to her, by which ſome ſleep was procured between the pains. I was informed that the membranes broke ſome time after I left her, and that there ſeemed to be the uſual quantity of liquor amnii. The next morning being hot and thirſty, and her pulſe very quick, I directed ten ounces of blood to be taken from her arm, and the bandage accidentally ſlipping off, ſoon after her arm was tied up, ſhe might perhaps loſe as much more, before it was diſcovered. No alteration whatever had taken place, either in the ſtate of the os uteri, or the poſition of the child's head.

In ſo extraordinary and ſingular a caſe, I naturally wiſhed (on my own account)

account) for the advice and aſſiſtance of my profeſſional friends; while at the ſame time, I knew it would give them much ſatisfaction to have an opportunity of examining ſo diſtorted a pelvis, and of ſeeing the event of ſo ſingular a caſe. Accordingly I met in conſultation that evening, Drs. Bromfield, Denman, Walker, and Mr. Watſon; Dr. Hunter's preſence was requeſted, but he was engaged. Every gentleman preſent immediately ſatisfied himſelf, by examination per vaginam, of the dimenſions of the pelvis, concerning which there was the ſmalleſt poſſible difference of opinion; ſome thinking it rather narrower, but none wider than the dimenſions ſtated above. We weighed with great deliberation, as became us, every circumſtance by which our future conduct in this caſe, ought to be regulated; particularly, we uſed our beſt endeavours to determine the ſtate of the child in utero, and whether, if the Cæſarian operation ſhould be performed, which

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we had in contemplation to do for ſome time, there would be a certainty of preſerving one life at leaſt. We were rather diſpoſed to believe that the child was dead. It was therefore agreed, that an attempt at leaſt, ought to be made to deliver the poor creature, by opening the child's head, and extracting it with the crotchet.

It was my duty to perform the operation, which I began about eleven o'clock that night, after placing her in the uſual manner, cloſe to the edge of the bed on her left ſide, as the ſituation moſt commodious both for the patient and myſelf. Even the firſt part of the operation, which in general is ſufficiently eaſy, was attended with conſiderable difficulty, and ſome danger. The os uteri was but little dilated, and was awkwardly ſituated in the center, and moſt contracted part of the brim of the pelvis. The child's head lay looſe above the brim, and ſcarce within reach of the finger, nor was there any

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ſuture directly oppoſite to the os uteri. Having deſired an aſſiſtant to compreſs the abdomen with ſufficient force, to keep the head in contact with the brim of the pelvis, ſo as to prevent its receding from the ſciſſars, upon the neceſſary preſſure of the point to make the perforation; I introduced them with the utmoſt caution, through the os uteri, and after repeated trials, at length ſucceeded in fixing the point into the ſagittal ſuture, near the poſterior fontanelle. I very ſoon and with great facility, penetrated into the cavity of the head; deſtroyed the texture of the cerebrum; with a common ſpoon extracted a conſiderable quantity, and breaking down the parietal bones, made an opening ſufficient for the free diſcharge of what remained.

In this ſtate we left her; and although ſhe was fatigued with this part of the operation, no opiate was given, as I wiſhed to have the full effect of the labour pains; hoping, that after the brain

brain was diſcharged, the bones would collapſe, and that a portion of them at leaſt might be forced into the pelvis. In this expectation however I was diſappointed; for notwithſtanding ſhe was prevented from ſleeping all night, by the frequency and violence of the pains; in the morning I was not ſenſible of the ſmalleſt alteration in the poſition of the child's head. During the whole day, the pains were neither ſo ſtrong, or ſo frequent as they had been; her pulſe was extremely quick, but tolerably ſtrong; the diſcharge from the vagina was very conſiderable in quantity, and moſt abominably fœtid. Drs. Bromfield, Denman, and Hunter ſaw her in the courſe of the day; ſhe was examined beſides, by more than thirty ſtudents in midwifery, who were at that time attending Dr. Denman's and my lectures, and which ſhe willingly permitted at my requeſt, from a repreſentation of the ſingularity of her caſe, and

the utility which might reſult from its being more generally known.

Towards the evening the pains again conſiderably increaſed, and as I wiſhed to benefit from the full effect of them, no opiate was given, ſhe therefore had no ſleep; and the pains continuing through the whole night, when I firſt ſaw her the following morning, her ſtrength was greatly reduced; her pulſe beat 140 ſtrokes in the minute, notwithſtanding every precaution had been uſed to guard againſt fever, particularly, by forbidding all ſtrong liquors, and by keeping the ward unuſually cool. Her ſpirits however were good, and her reſolution unabated; for although ſhe was extremely anxious to be delivered, and expreſſed her willingneſs to undergo any operation however painful for that purpoſe, ſhe was equally ready to ſubmit to my determination if any longer delay was required. Upon examination, a ſmall portion of the head was found ſqueezed into the pelvis;

indeed there were ſome little detached bits of the parietal bones lying looſe in the vagina.

Our intention, by delaying the extraction of the child ſix and thirty hours after opening the head, was in the firſt inſtance, to allow the uterus opportunity, by its continued contractions, to force the head as low, and as much within reach of the crotchet, as the nature of the caſe admitted; and afterwards, to induce as great a degree of putrefaction as poſſible in the child's body, by which means it would become ſoft and compreſſible, and afford the leaſt poſſible reſiſtance in its extraction. Theſe two purpoſes appeared to me now completely accompliſhed, and that no further advantage was to be expected from further delay. On the contrary, I was fearful the permitting ſo large a maſs of putrid matter as a child at full time with placenta, &c. to remain in the uterus longer than was abſolutely neceſſary, might expoſe her to the fu-

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ture danger of a putrid fever, if ſhe ſhould eſcape all material injury from the inevitable violence, and conſequent danger of the operation.

I immediately determined to begin to make an attempt to extract the child; I call it an attempt, for I was far from being ſatisfied in my own mind of the practicability. Adverting to the very ſmall ſpace of only one inch and three quarters at the utmoſt, and in the wideſt part, and that only on one ſide the projecting ſacrum, while the ſpace between it and the ſymphyſis, and on the other ſide, barely amounted to three quarters of an inch, I truſt I am juſtified in my feelings and expreſſion. Having placed the patient as uſual on her left ſide, near the edge of the bed, as the moſt commodious ſituation, Mr. Shute of Exeter, who then reſided in the hoſpital as houſe pupil, and another ſtudent being preſent as aſſiſtants; about ten o'clock on Wedneſday morning, I began the operation; Dr. Bromfield was ſo obliging as to call on me, ſoon after-

wards; but his engagements permitted him to ſtay only a few minutes.

The os uteri being ſituated as before deſcribed, in the moſt contracted part of the brim of the pelvis, where the ſpace was incapable of permitting the introduction of the curved point of the crotchet, without great difficulty and danger. My firſt endeavours were bent to draw the os uteri with my finger, into the wideſt part of the brim of the pelvis, and to dilate it as much as poſſible. Both the removal of the os uteri, and ſuch dilatation of it as the bones admitted, were effected without much trouble. I then introduced the crotchet through the perforation, into the head, and by repeated efforts made in the ſloweſt and moſt cautious manner, deſtroyed almoſt the whole of the parietal and frontal bones, or the whole upper and preſenting part of the head; and as the bones became looſe and detached, they were extracted with a pair of ſmall forceps, to prevent as much as poſſible, the lacera-

ceration of the vagina, in their paſſage through it.

The great bulk of the head, formed by the baſis of the ſkull, ſtill however remained above the brim of the pelvis, and from the manner in which it lay, it was impoſſible to enter, without either diminiſhing the volume, or changing the poſition; the former was the moſt obvious method, for it was a continuation of the ſame proceſs, and I truſted would be equally eaſy, in the execution; I was however moſt egregiouſly miſtaken and diſappointed, being repeatedly foiled in every endeavour to break the ſolid bones which form the baſis of the cranium; the inſtrument at firſt invariably ſlipping, as often, and as ſoon as it was fixed, or at leaſt, before I could exert ſufficient force to break the bone. At laſt however by changing the poſition of the inſtrument, and applying the convex ſide to the pubis, I fixed the point I believe, into the great foramen, and by that

means became maſter of the moſt powerful purchaſe that the nature of the caſe admitted; of this I availed myſelf to the utmoſt extent, ſlowly, gradually, but ſteadily increaſing my force, till it arrived to that degree of violence, which nothing could juſtify but the extreme neceſſity of the caſe, and the abſolute inability in repeated trials, of ſucceeding by gentler means. But even this force was to no purpoſe; for I could not perceive, that I had made any impreſſion on that ſolid bone, or that it had been the leaſt advanced by all my exertions.

I became fearful of renewing the ſame force in the ſame way, and therefore abandoned altogether the firſt idea of breaking the baſis of the cranium, and determined to try the ſecond, by endeavouring to change the poſition. I once more examined, with a view to aſcertain as accurately as the mangled ſtate of the head would admit, how it preſented, and what proportion in that ſtate it ſhould

ſeem

ſeem to bear to the aperture through which it was to paſs; from the information thus procured, I muſt acknowledge, the ſecond method appeared to me but a forlorn Hope, however there was no other reſource. I therefore again introduced the crotchet in the ſame manner, and fixing it in the great foramen, got poſſeſſion of my former purchaſe, then introducing the two fore-fingers of my left hand, I endeavoured with them to raiſe one ſide of the fore-part of the head and turn it a little edge-ways; immediately and eaſily ſucceeding in this attempt, the two great objects were at once accompliſhed: for the poſition was changed, and the volume diminiſhed. Continuing my exertions with the crotchet, I ſoon perceived the head to advance, and examining again, found a conſiderable portion of it had been brought into the pelvis.

Every difficulty was now removed, and by a perſeverance in the ſame means for a ſhort time, the remaining part of the

head was brought down and out of the os externum.

After waiting a few minutes a napkin was put round the neck of the child, and given to an aſſiſtant. I then introduced the crotchet, and (firſt opening the thorax) fixed it firmly in the ſternum; by our united force ſtrongly exerted for about a quarter of an hour, firſt one ſhoulder was brought down and then the other; and laſtly after opening the abdomen, the whole body (with the ſternum and ſpine preſſed cloſe together) was extracted in the moſt putrid and almoſt diſſolved ſtate, but it appeared to be a moderately ſized child at full time. The bones of the head were preſerved. The placenta came away without much trouble. The operation continued for about three hours, and the poor creature altho' ſhe had been in ſtrong labour three days, and her bodily ſtrength was much exhauſted by the violent and unavailing pains, yet ſhe ſupported the whole buſineſs with ſurprizing fortitude, and ſuf-

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fered much leſs than might reaſonably have been expected, either from the length of the labour, or the extreme violence in the delivery. She went to ſleep very ſoon after the operation was finiſhed, paſſed a good night, voided her urine freely, complained of very little pain, had only the uſual fever, and recovered ſo faſt that ſhe ſat up the ſeventh day, acknowledging with great gratitude, that ſhe was then as well in all reſpects, as in any former period of her life.

As far as I have been able to procure information either from books, or the oldeſt and moſt experienced practitioners of this city, this woman's pelvis was the ſmalleſt through which a child at full time and of the ordinary ſize, however leſſened by art, has ever been extracted; and as it was in contemplation in this very caſe to perform the Cæſarian operation, if we could have been ſatisfied of the life of the child; upon the preſumption of the impoſſibility of bringing it under the

the circumſtances of age and ſize above deſcribed through the natural paſſages, I hope the event of this caſe may prove the means of frequently preventing that fatal operation in future.

Before I conclude, truth and candour require me to acknowledge, that notwithſtanding I have ſtated this woman's pelvis to be the ſmalleſt, where ſuch delivery has ever been ſucceſsfully performed; yet I can lay claim to no merit whatever on the occaſion, the operation was undertaken contrary to my opinion, ſucceeded very contrary to my expectation, and yet in the performance, it neither required extraordinary ſkill or extraordinary attention, I can therefore only be entitled to the negative praiſe of having done no material injury to my patient, by the extreme and unavoidable violence of the operation.

CHAPTER

CHAPTER II.

SECTION I.

ON THE DIVISION OF THE SYMPHYSIS PUBIS.

HOWEVER ſucceſsful the Cæſarian operation, if early performed, muſt be to the child, and however ſucceſsful in one or two modern inſtances on the Continent, it may have proved to the mother, the immediate cruelty of the performance, and the little probability of ſafety to the unhappy patient, have rendered its prevention a great deſideratum in practical midwifery.

Under ſuch deſperate circumſtances, as have been uſually ſuppoſed to require the

the Cæſarian operation, whatever invention may have a tendency to diminiſh the danger to the mother, while it has the preſervation of the child, for its immediate and indiſpenſable object, demands a candid examination from the practitioner of midwifery, and has a fair claim to the gratitude of the public.

The ſection or diviſion of the ſymphyſis pubis, has been lately invented and performed at Paris, for that purpoſe with ſome ingenuity and much humanity, by Monſ. Sigault, a phyſician practiſing midwifery in that city. It was intended by the inventor, infallibly to ſuperſede the Cæſarian operation; how far that was a reaſonable expectation even upon theory, and how far it may be entitled to any praiſe from experience, are to be the objects of the following enquiry.——It is not perhaps very eaſy to explain by what fatality it has happened; but there is certainly no account of the invention of any remedy in the records of medicine, or any new

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operation in the practice of ſurgery, which has been attended at its outſet with ſuch extraordinary circumſtances, or has been uſhered into the world with ſuch ſingular eclat.

The diviſion of the ſymphyſis pubis, was not offered to the conſideration of the practitioners of midwifery, in the uſual way of an hint or experiment, to be confirmed or rejected as future experience might warrant; but upon the very firſt performance, it was immediately, and moſt enthuſiaſtically adopted, by a numerous body of learned men, and competent judges, the *Faculté de Medicine de Paris*, or *College of Phyſicians* in that city, who by their conduct on this occaſion ſeem to have thought, that it was impoſſible to be too prodigal of their praiſe, or too profuſe in their rewards; for upon the report of their committee, of the accompliſhment of the cure of the firſt patient, they framed a reſolution, not merely expreſſive of their approbation, but conveying the moſt extra-

travagant compliments to Monſ. Sigault*, by concluding it with an order for a *medal*

* " Primo tentamini interfuerit Ordo Saluberrimus ; " mox quibus honoribus tam egregiè auſos proſpero " beatos ſucceſſu, ipſe, plaudentibus omnium ordi- " num civibus, *auxerit, ornaverit, cumulaverit.*"

Rouſſel. lib. citat. p. 111.

The whole reſolution is too curious to be omitted.

" Collegæ clariſſimo M. Sigault, operationis illius " inventori, defenſori, actori, eò majora deberi pro- " feſſa eſt ſaluberrima facultas, quo majus arti medicæ " dedit incrementum, quo præſtantiora fecit ingenio, " manu, & opibus erogatis : juſtum in ſua non eſſe po- " teſtate præmium *Civium Conſervatori* ; in honore " ſemper apud ſe futurum eximium illum Collegam, " & omnibus preſentibus ac poſteris commendandum " laudandumque voluit. Quæ propter juſſit in calculi " argentei aversâ facie incidendam eſſe hanc inſcrip- " tionem.

" *Anno* 1768 *Sectionem Symphyſeos oſſium pubis invenit,* " *propoſuit : Anno* 1777 *fecit feliciter M. Sigault, D. M. P.* " *Ipſique centum calculos illos eſſe offerendos.*

" Cum vero, predicante M. Sigault conſtet Collegam " alium, M. Alphonſum le Roy, ſuis experimentis, " ſuis laboribus, adhortationibus, operationis facien- " dæ, abſolvendi partûs & vulneris ſanandi partem " haud ingloriam fuiſſe, juſſit Ordo Saluberrimus, ad " finem inſcriptionis hæc addenda eſſe verba.

" *Juvit M. Alphonſus Le Roy, D. M. P.*

" Cui quinquaginta offerentur calculi illi argentei." Vid. Res Geſtæ. p. 10, 11, & ſeq.

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to be ſtruck upon the occaſion; deſcribing the time, place, and perſon, when and by whom this invention was contrived and executed, and upon whom, as the preſerver of his fellow citizens, they expreſsly ſay, it is not in their power to beſtow a reward adequate to his merit. By theſe means was this great momentous event to be announced to the preſent generation, and afterwards be handed down to the remoteſt poſterity. Laſt of all, that ſubſtantial reward might accompany empty praiſe, a royal penſion was procured for Monſ. Sigault*. Theſe circumſtances beſtow'd a luſtre and an importance on the operation, to which, by its own intrinſic merit, it was by no means entitled, and without which, in all probability, it would very ſoon have dwindled into deſerved obſcurity.

* Tout le monde ſait que la Faculté de Medicine de Paris, a fait frapper une medaille a M. Sigault, & que celui-ci a obtenu *une penſion du government*. Baudeloque l'art des Accouchmens, vol. II. p. 236.

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One cannot however be ſurprized, that circumſtances like theſe ſhould induce moſt favorable prepoſſeſſions in the opinion of the inhabitants and practitioners of any country, wherever they might happen; much leſs can one wonder at their effect in France, where in all affairs of life, it is well known to form a prevailing part of the national character, to be much under the influence of the imagination. The new operation was therefore immediately adopted, as a great improvement throughout that kingdom; but the ſplendor with which it made its firſt appearance was not confined to France, it ſoon extended over other parts of the continent; firſt dazzling the fancy, and then ſeducing the judgment, even of our cautious and learned neighbours, both in Holland and Germany. The celebrated profeſſor Camper of Groningen, a name pre-eminent in the learned world, having early indulg'd the moſt ſanguine hopes of its ſucceſs, upon theory, while in Germany, the ope-

operation itſelf was actually performed by the Preſident Siebold of the univerſity of Wurtzburg, and Profeſſor Guerard of the univerſity of Duſſeldorpe.

Though we can ſcarcely be ſurprized, at the ſpeedy and general adoption of this new operation throughout Europe, from the circumſtances attending its introduction; it is impoſſible to mention without cenſure, the unphiloſophical precipitation of the college of phyſicians at Paris on this occaſion, to which alone the frequent repetition of the practice is to be attributed; and for the conſequences of which, they alone are reſponſible. If a ſingle ſucceſsful caſe in any branch of medicine, however extraordinary, were to entitle a man to the ſplendid rewards granted to Monſ. Sigault, but eſpecially to a *medal*, every practitioner might reaſonably expect to have his name handed down to poſterity!

Such are the powers of nature, ſo active and vigorous in certain conſtitu-

tions is the Vis medicatrix, or that principle in animal bodies, which reſtores the machine when put out of order by accident or diſeaſe; and eſpecially that ability to reſiſt the fatal effects of violence, in whatever manner offered to the body, that there is ſcarce a ſituation to which it can be reduced, however alarming, where inſtances of moſt unexpected recovery have not happen'd. No diſcreet or ſober minded man, however perſonally intereſted in the event, is therefore very ſanguine in his expectation, from the ſucceſsful iſſue of a ſingle caſe, be the cure ever ſo compleat. If the credit and intereſt of an individual, which muſt be reaſonably ſuppoſed, and even allowed, ſomewhat to bias his judgment, would not juſtify him in the haſty adoption, and unqualified recommendation of any method on ſuch ground; how is it poſſible on this occaſion, to reconcile with ordinary prudence and diſcretion, the conduct of the college of phyſicians at Paris? Inſtead of that ſe-

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vere and critical examination, becoming grave and learned men, previous to the adoption of any novelty; they firſt, with great parade, promulgate to the world, and then ſanctify by their authority, on the ſlight evidence of a "hair breadth 'ſcape," an innovation on the eſtabliſhed practice, painful and hazardous to a great degree in the very performance, precarious in its beneficial effects, and moſt dangerous in its future conſequences; an innovation, which does not appear to have been required by neceſſity, but which nothing leſs than the laſt neceſſity could juſtify or excuſe. If candour requires of *us*, that we give them credit for the beſt intention in rewarding preſent merit, to ſtimulate to future exertions of induſtry and ingenuity, for the benefit of ſociety; at leaſt, their peculiar ſtation and duty required of *them*, to be extremely circumſpect in the diſpoſal of ſuch rewards; otherwiſe, inſtead of promoting the intereſt of humanity, they would only

thereby, urge and encourage ignorant, adventurous, or enterprising men, to rash and dangerous undertakings; the prevention of which was one principal object, that all governments have had in contemplation, by the institution of medical colleges, or corporations.

Very much to the credit of the practitioners of this country, and a strong proof of that sound sense and sobriety of judgement, which in all affairs of life characterize Britons; this new-fangled operation, notwithstanding the alluring representation of its partisans, and which the President Seibold declares * with regret, first seduced him; as far as I have been able to learn, has never once been performed in this kingdom. I believe we are much indebted for its prevention likewise, to the early interference of a Gentleman of great expe-

* "Je regrettai vivement, comme je m'en repens "peut-etre encore de m'etre laissé seduire *aux Appas* "de l'operation nouvelle." See a Letter from Mr. Seibold to the Royal Academy, quoted by Baudeloque, d'Art des Accouch. vol. II. p. 251.

rience,

rience, abilities, and reputation, whoſe ſuperiority in anatomical and obſtetrical ſcience, is univerſally acknowledged all over Europe, but whoſe opinion is deſervedly reſorted to, as the higheſt authority in this country. The women of Great Britain are therefore under conſiderable obligation to Dr. Hunter, who from an accurate menſuration of thoſe pelvis's, where the Cæſarian operation had actually been performed in this country, and of others ſtill ſmaller preſerved in his muſeum, has demonſtrated the futility of the ſection of the ſymphyſis, as a ſuccedaneum for that operation, or as a certain means of preſerving both mother and child. He has beſides, with great good ſenſe, and profeſſional knowledge, and above all, with an earneſtneſs for the intereſts of humanity, which have invariably marked his character throughout life, endeavoured to counteract the intemperate praiſe of the College of Phyſicians at Paris, and prevent its influence in this country.

After ſtating above, that this operation had never been performed in Great Britain, it may here, reaſonably be aſked, why then is it neceſſary to publiſh objections againſt what may probably never happen? To this I beg leave to anſwer, that although Dr. Hunter reprobates the ſection, as a ſubſtitute for the Cæſarian operation, and expreſſes his doubts of its ever being of general uſe, and cautions againſt its precipitate admiſſion; yet he deſcribes a ſuppoſed caſe, where he thinks it might be "a *conſiderable improvement* "in practice."

Very lately too, another Gentleman of this country, of conſiderable abilities and reputation, has declared in a popular book, that "he is inclined to "think *favourably* of this operation," while however he ſenſibly and candidly acknowledges, that "nothing but "time and future experience can ſuf-"ficiently determine whether it ought "to be rejected or adopted." But as he

he afterwards ſtates at conſiderable length, all the objections which had then been urged againſt it, enters minutely into their diſcuſſion, and profeſſes to have anſwered them fully; at the ſame time, deſcribing an experiment made at a public hoſpital, in the preſence of ſeveral medical gentlemen, in confirmation of his arguments againſt what had been generally eſteemed a moſt material objection. Dr. Leake muſt be conſidered as a favourer, or adviſer, if not a ſtrenuous partiſan, of this new operation.

It is my intention then, by this publication, in the firſt inſtance, to conſider, if Dr. Hunter's opinion be well founded, that the operation, qualified by the circumſtances he deſcribes, or ſuppoſes, can ever be "*a conſiderable* "*improvement*," in practical midwifery; and afterwards to examine the arguments produced by Dr. Leake, in form of anſwer to the objections, but which are evidently intended to operate in ge-

general and poſitive favour of this operation, as a ſubſtitute for the Cæſarian ſection; and thus I ſhall endeavour to counteract the influence that ſuch authorities might otherwiſe have in this country.

Laſtly, as infinitely the moſt important, I ſhall collect, and preſent to the reader, the reſult of the experience of five years, during which period this operation has been performed at leaſt four-and-twenty times in different parts of Europe. Theſe caſes had not happened when Dr. Hunter wrote on this ſubject; and concerning moſt of them, Dr. Leake, by not mentioning them, ſhould appear not to have been informed at all; and of ſome, he has certainly been much miſinformed, particularly that of the Preſident Seibold of Wurtzburg, tranſmitted to him by Dr. Hauſeman of Brunſwick; or I am perſuaded Dr. Leake would not have deſcribed it as a *ſucceſsful* caſe, or offered it to the public as

fa-

favorable evidence, in ſupport of the operation.

Upon the event of theſe caſes muſt the merit of the practice reſt: but as no particular account of this operation has been publiſhed in this country, and as it has engaged the attention, and divided the opinion of phyſicians in many parts of Europe; before I deſcribe the caſes, in which it has been performed, (and concerning which, as was my indiſpenſable duty, I have ſpared no pains to procure the beſt information), I ſhall premiſe a ſhort hiſtorical detail and review, of the invention and progreſs of this operation, from the firſt idea, offered by Monſ. Sigault to the Royal Academy of Surgery in 1768, to the lateſt publication which has come to my knowledge; from a perſuaſion, that ſuch an account will not be unacceptable to many of my readers; promiſing however to compreſs it into the ſmalleſt poſſible volume, conſiſtent with perſpicuity, and the avowed impartiality of this eſſay, which obliges me

to

to conſider and candidly examine the arguments adduced in favour, as well as the objections urged againſt the operation.

It does not neceſſarily fall within my intention to conſider at all, much leſs to decide a queſtion, which has been repeatedly diſcuſſed by writers on midwifery, from the days of Hippocrates to the preſent times; viz. whether the junctions of the bones which compoſe the pelvis, actually relax and ſtretch, ſo as to enlarge its capacity during parturition? It may however be proper juſt to ſtate, that as anatomical obſervation demonſtrates, that the intervening cartilages and connecting ligaments of the pelvis do invariably become ſofter, and leſs capable to reſiſt any diſtending force as parturition approaches; and that ſoon after parturition has taken place, they are again reſtored to their priſtine firmneſs; ſo it muſt be preſumable, that this general effect of relaxation, is either intended by nature, to anſwer ſome uſeful purpoſe at all times in labour;

bour; or that otherwiſe, it is meant to prepare the pelvis againſt ſome particular exigence, which may occur in ſome labours, and which may then require ſuch an alteration to facilitate delivery. This anatomical obſervation, and the arguments founded upon it, firſt ſuggeſted the ingenious idea of this operation to Mr. Sigault, even admitting that Pinæus, as ſome think†, had recommended the ſame operation two hundred years ago. The expreſſions of Pinæus * are ſo equivocal (conveying at

† " M. Sigault n'eſt pas le premier qui ait conçu " l'idee d'agrandir le baſſin de la femme dans la vue " de le rendre acceſſible au fœtus; Severin Pineau " l'avoit recommandé pres de deux cens ans avant " lui, dans l'opinion ou il etoit que ce ſeroit en vain " que ſe delateroient l'orifice de la matrice & l'ouver- " ture des parties exterieures ſi les os pubis ne s'ecar- " toient pour le paſſage de l'enfant." Baudeloque l'Art d'Accouchemens, vol. II. p. 231.

* " Si enim natura oſſa capitis non perfecerit in " utero, neque futuras ullas his effinxerit, ut deflexis " oſſibus & ut cumque compreſſo capite fœtus in " enixu facilius expellantur utero, execantque foràs: " quanto magis indilatandis maternis oſſibus ſagax " &

at moſt but a hint) that Mr. Sigault is undoubtedly intitled to the credit of the invention; and if a cold compliment can ſatisfy him, after the extravagant and panegyrical language of his friends and partiſans, I ſhould be happy at this opportunity, of bearing teſtimony to the ingenuity and humanity of the idea; at the ſame time, I muſt beg to be excuſed from acknowledging the *divine inſpiration* attributed to him on this occaſion by Monſ. Rouſſel de Vauzeſme, "Cl. Sigault hæc alta mente "diu revolvens, ſolus *divino quaſi af-* "*flatus numine* quam monſtrarat natura, "viam ingreditur*."

"& provida eadem erit, contra eorum opinionem "qui iſta oſſa dilatari, negant. Præterea ignobi- "liores partes, nobilioribus ſemper miniſtrant & ob- "ſequuntur, nec non continentes, ſeu externæ, non "tantum dilatari, ſed etiam ſecari tuto poſſunt, ut "internis ſuccuratur, ut Galenus ait. At nemo "ſane eſt mediocriter in medicina verſatus, qui non "noverit pueros in utero contentos multo nobiliores "eſſe maternis oſſibus, pelvim, ut vulgo loquimur, "conſtituentibus." Sever. Pinæus, cap. 10, Opuſcul. & Phyſiolog. & Anatom. lib. 2.

* Lib. citat. p. 46.

SECTION

SECTION II.

TOWARDS the latter end of the year 1768, Monſ. Sigault preſented a memoire to the Royal Academy of Surgery at Paris, recommending the ſection or diviſion of the ſymphyſis pubis, as a ſubſtitute for the Cæſarian operation.

He ſays, that he had performed it ſeveral times, on dead ſubjects, and could eaſily gain an inch by the ſeparation. At firſt he only modeſtly propoſed to have it tried on ſome living animals, and then on condemned criminals. The operation, he ſays farther, had its friends, and oppoſers; but that the more general opinion was againſt it: and that at firſt, a looſe objection was made

made by the Academy, that the ſpace gained would be inadequate to the purpoſe; and that the re-union of the bones might be precarious. At laſt, however, it was formally referred to Monſ. Rufel, He made an unfavorable report, the memoire was rejected, and the operation proſcribed. Monſ. Sigault was not diſcouraged by this rejection of the Royal Academy, from again defending the ſame opinion in his Theſis, when he graduated at Angers, and repeating it once more at Paris, when he applied for his licence.

This idea of Monſ. Sigault was communicated as a piece of medical news, in a letter from Monſ. Louis, ſecretary to the Royal Academy, to the celebrated profeſſor Camper of Groningen, which letter was written in March, 1769. It gives an account of the Academy being engaged in conſidering the Cæſarian operation, in conſequence of its having been lately performed twice at Paris, and once with ſucceſs. Monſ. Louis

Louis adds a ſhort detail of Monſ. Sigault's project, and concludes with ſaying, " Il ſe promet plus d'advanta-" ges qu'il ſe pourroit vraiſemblablement " en retirer, & il n'a pas aſſes eſtimé les " dangers," &c.

In an hiſtorical detail of any ſubject, it ſeems moſt regular to give a ſuccinct analyſis of the authors ſeriatim, as they publiſhed their works. I intend to purſue that method, as far as they ſeem to me worthy of notice, or as I have been able to procure the books themſelves or any good account of them. In conformity therefore with that plan I muſt next review profeſſor Camper's letter to Monſ. Van Geſſcher, although it interrupts the account of Monſ. Sigault, the inventor. This letter was firſt publiſhed in the Dutch language, and was afterwards tranſlated into Latin by the author himſelf, and reprinted with his treatiſe on inoculation for the ſmall-pox, in 1774, three years before the operation was performed by Monſ. Sigault. It is entitled de Emolumentis

ſec-

ſectionis Synchondroſeos oſſium pubis in partu difficili. Profeſſor Camper, not leſs diſtinguiſhed for the univerſality of his learning *, than for his abilities as a phyſician, begins his letter with ſome fanciful opinions of his own, reſpecting difficult parturition in Holland, and a recital of ſome whimſical ideas collected by Haller from different travellers, tending to eſtabliſh a general opinion, that in ſome countries well formed women naturally bear children better than in others. He highly commends the vectis and forceps as generally ſuperſeding in Holland the uſe of the crotchet, but acknowledges however, that he has ſometimes been compelled to open the child's head, and deliver with that inſtrument, adding with great humanity "nunquam ſine "ſummo animi dolore illis circumſtan-"tiis reminiſcor: etiamſi conſcientia

* See a Catalogue of his works publiſhed by himſelf in 1779.

"mea,

" mea nunquam me accuſet de ulla " imprudentia vel crimine.——Certam " tandem, dummodo poſſibile ſit, exco- " gitem methodum, qua capitis demo- " litionem per uncum, æque atque Cæ- " ſariam ſectionem evitare poſſim *!" This method he ſuppoſes the ſection of the ſymphyſis would infallibly prove.

He had himſelf taken notice twelve years ago, in a diſſertation added to his edition of Mauriceau's works, publiſhed in Holland in 1759; that " natura ipſa " monſtraverit viam relaxando, & ſepar- " ando a ſe invicem oſſa pubis in om- " nibus fere difficilibus partubus †," and again on the ſame ſubject ‖, ba- " ſin meæ propoſitionis hæc inniti ex- " perientia; quod natura ipſa nos " doceat ſeparatione oſſium pubis inſig- " nem dilatationem & ſpatium pelvi " conciliare." He then expreſſes his ſatisfaction at the diſcovery, as corre- ſponding with his own opinion, and his gratitude for the inventor, in the

* P. 122, lib. citat. † P. 123. ‖ P. 164.

following terms of admiration " Tan-
" to perfuſus gaudio inventorem amba-
" bus ulnis amplecti voluiſſem, ſi li-
" cuiſſet ab ore ejus *excellentiſſimam*
" hanc cogitationem, vel ſchema ac-
" cipere † !" &c. And after inform-ing his readers, that he had long quitted the practice of midwifery, and was not in a ſituation to derive any lucrative advantage from the diſco-very, that the moſt benevolent mo-tives, could alone therefore, urge him to exclaim, " Nihil præter aliorum bo-
" num, nihil præter univerſam utilita-
" tem, nihil præter concivium meorum
" ſalutem, me tanti poterat participem
" reddere gaudii, tanti inquam gaudii,
" quanto nemo adfici poteſt, quam cu-
" jus animus juſta facile commovetur
" miſericordia * !"

Mr. Camper, in the firſt place, en-deavoured to remove an objection early ſuggeſted by the Royal Academy of Surgery, and mentioned by Monſ. Louis in his Letter, viz. the uncertainty of the

† P. 130. * P. 131.

the re-union of the oſſa pubis; this re-union, however, he aſcertained beyond a poſſibility of doubt, by procuring the operation to be performed on a ſow, by Profeſſor Municks, Dr. Allardi, and Mr. Woldering; the creature was well, and able to walk in eight days. He likewiſe demonſtrated in the diſſecting room, that a conſiderable ſpace might certainly be gained by the ſection; for that a child which could not be made to paſs through the pelvis, with the bones united, was readily and eaſily extracted after the diviſion of the ſymphyſis had been performed. But the particulars are not ſufficiently intereſting to be worth relating now, becauſe many experiments have been ſince made on deformed pelvis's, and what is infinitely more ſatisfactory, the operation itſelf has been ſeveral times performed on living ſubjects.

Profeſſor Camper had not influence to procure a condemned criminal, which

appeared to him the moſt effectual manner of aſcertaining the efficacy of the operation; he therefore was obliged to be ſatisfied with the experiments in the diſſecting room, and on living animals. He concludes his Letter, as far as it particularly relates to our ſubject, with obſerving, that there are caſes where neither the forceps or the vectis can ſucceed; in which he would recommend the ſection as preferable to the Cæſarian operation, becauſe ſafer to the mother; and preferable to the crotchet, becauſe ſafer to the child; in the caſe above deſcribed, ſays he, "Nihil reſtat quam "ut matri venter aperiatur, vel fœtus "unco extrahatur, vel ut propoſitio "mea, tanquam *media via* in uſum re-"cipiatur & approbetur †!" &c.

Profeſſor Camper, being tinctured with the ſame enthuſiaſm which unaccountably affected all the firſt partiſans of this new operation, has over-rated beyond all moderation, the advantages to be gained by it, and expreſſed himſelf with an ex-

† P. 186.

extravagance unuſual to men of ſcience, but moſt eſpecially to phyſicians. What is more extraordinary, he does not appear to have been at all aware of the future inconveniences and dangers, which might reaſonably be expected to attend and follow this operation; dangers, which have been in moſt caſes abundantly, and in ſome too fatally confirmed by experience. His book is nevertheleſs the work of a man of undoubted ſcience, indefatigable in promoting medical knowledge, and earneſtly ſolicitous for the welfare of mankind.

It cannot be ſuppoſed that an operation, ſo new in its manner, ſo exceptionable in many other reſpects, and which had been reprobated, and even proſcribed by the Royal Academy of Surgery at Paris, could be preſented to the public, and warmly recommended to general notice, without a critical examination of its merits, without oppoſition, or indeed without reprehenſion. Accordingly, Monſ. Baudeloque, Surgeon at

Paris, and Member of the Royal Academy, previous to Monſ. Sigault's firſt operation on Souchot, defended a theſis * in the public ſchools of Paris, of which the following is his own analyſis †. " Apres avoir combattu l'opi-
" nion trop accrédité des anciens & des
" modernes, ſur l'ecartement ſponta-
" née des os du baſſin dans l'accouch-
" ment ſoit naturel, ou contre-nature;
" & avoir démontré ſon inutilité dans
" les femmes bien conformées, ſon in-
" ſuffiſance dans celles dont le baſſin eſt
" vicié, & ſes inconvéniens dans les unes
" & dans les autres, nous nous ſommes
" attachés à prouver qu'un écartement
" plus conſiderable, procuré par la ſec-
" tion de la ſymphyſe du pubis, écarte-
" ment que Monſ. Sigault ſembloit
" alors n'évaluer qu'à douze ou quinze
" lignes au plus, ne pouvoit rendre le
" baſſin aſſez ſpacieux pour le paſſage

* Ce programme a pour titre: An in partu propter anguſtiam pelvis impoſſibili, ſymphyſis oſſium pubis ſecanda? 1776.

† L'Art des Accouchments, tom. II. p. 235.

" de

" de l'enfant, quand ſa mauvaiſe con-
" formation exigeoit excluſivement l'o-
" peration céſarienne.

" Nous n'avons établi aucun paral-
" lele entre ces deux opérations, conſi-
" dérées du côté de leurs accidens;
" parceque l'obſervation n'avoit pas
" encore fait connoître ceux dont la
" ſection du pubis ſeroit ſuſceptible.
" Nous avons pensé qu'il ſuffiroit de
" faire voir que cette nouvelle méthode
" ne pouvoit ouvrir une voie ſuffiſante
" & aſſez libre pour mettre la vie de
" l'enfant en sûreté; & que de tous les
" accidens que paroiſſoient devoir la ſui-
" vre, celui-ci étoit le plus grand,
" puiſque le but qu'on ſe propoſoit
" par cette opération étoit de conſerver
" l'enfant, en epargnant les jours de la
" mere. L'experience n'a pas tardé
" à confirmer notre jugement: chaque
" eſſai qu'on a fait de cette méthode,
" *a eu pour ainſi dire, ſa victime*; &
" le nombre pour le temps, n'en eſt
" pas petit: effet alarmant des louan-
" ges indiſcretes qu'on a données a

" l'auteur de cette opération, & de l'en-
" thouſiaſme avec lequel on a exagéré
" ſes faux ſuccès."

Upon Monſ. Sigault's communicating his opinion of this operation to Mr. Alphonſe le Roy, he warmly adopted the idea, and offered his aſſiſtance to Monſ. Sigault on the firſt favorable opportunity, this occurred in the following year, viz. September 30, 1777, when a ſoldier's wife, named Souchot, fell into labour of her fifth child. In her former labours ſhe had always been delivered of dead children. In the labour preceding this, Monſ. Sigault propoſed firſt the diviſion of the ſymphyſis, and then the Cæſarian operation, with a view of ſaving the child; but both were rejected by ten accoucheurs, phyſicians, and ſurgeons, and the child was turned with great difficulty, and afterwards brought dead into the world. The event of that labour determined Monſ. Sigault on this occaſion, to perform the ſection without conſultation; Monſ. Le Roy alone aſſiſted him. They each have

have publiſhed an account of the operation, the progreſs of the caſe, and the completion of the cure, minutely detailed reſpecting the ſymptoms in general, but not very accurately concerning ſome other eſſential circumſtances; and to my comprehenſion the operation was not well underſtood, as to its probable conſequences. Such as it is deſcribed, it might be deemed improper to omit. I ſhall therefore abridge it by ſelecting what appear to me the moſt important circumſtances attending it, from the relation of Monſ. Sigault*, Monſ. Le Roy||, or the Committee of the Faculté de Medicine†.

Monſ. Sigault with a common biſtory cut through the integuments, and linea alba, beginning the operation at the upper and central part of the ſymphyſis pubis; then introducing his forefinger as a director, he cut through the ligaments and cartilage; immediately

* Memoire de M. Sigault lu aux Aſſemblées de la Faculté, &c.

|| Recherches hiſtoriques ſur la Section de la Symphyſe, &c.

† Recit. &c. &c. par la Faculté de Medic. de Paris.

on

on the completion of which, the two oſſa pubis, with a peculiar noiſe, *ſpontaneouſly* ſeparated two inches and a half; this was demonſtrable, for Monſ. le Roy laid his four fingers into the opening. Monſ. Sigault immediately introduced his hand into the uterus, broke the membranes, and brought down the feet. Monſ. le Roy accompliſhed the delivery. The whole operation, both ſection and delivery, was finiſhed in five minutes. The child was born alive. A ligature was applied round the body of the mother, to keep the pelvis firm. The patient having no bad ſymptom, was left till next day, when every circumſtance continued favorable; ſhe had paſſed her urine voluntarily twice, there had been no hæmorrhage, and ſhe had ſuffered little pain.

October the firſt, being the day of the monthly meeting of the college, Monſ. Sigault and Monſ. le Roy, firſt deſcribing the new operation, entreated that a committee might be appointed to examine into the ſtate of the patient, to

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ſuperintend the treatment, and report the progreſs and accompliſhment of the cure; Meſſ. Grandelas and Deſcemet, two eminent accoucheurs, were appointed.

By their firſt report it appears, that the meatus urinarius was wounded in the operation; and by all the accounts it farther appears, that ſhe went on to the ſixth day without any untoward ſymptom, occaſionally however ſuffering conſiderable pain in the ſacro-iliac region of the left ſide. On that day however ſhe was ſeized with a rigor, which was ſucceeded by a fever, difficulty of breathing, &c. theſe ſymptoms, were attributed to irregularity of diet, and uneaſineſs of mind; they continued during the next day; the diſcharge per vaginam was very thin, and in great quantity; ſhe ſuffered acute pain, and the dreſſings from the wound were for the firſt time, on that day of a black colour. On the 11th and 12th days the diſcharge was exceedingly increaſed

creaſed in quantity, ſhe was become weak and languid, and her pulſe was very quick, low, and irregular. Monſ. Sigault having been taken ill, the care of the patient altogether devolved on Monſ. le Roy, to whom the caſe appeared very alarming. On the 15th day however ſhe began to recover; but again relapſed, inſomuch that on the 21ſt all the ſymptoms were aggravated to ſuch a degree, as to induce Monſ. le Roy to think ſhe could not ſurvive that night; ſhe had a violent fever, ſuffered great pain, and the diſcharge was become ſo profuſe as even to penetrate through the bed, and was obliged to be caught in a baſon. This diſcharge by analyſis was found to be urine; ſhe recovered from this attack, but again relapſed on the 26th day, when ſhe was ſeized with difficulty of breathing and rigor, her abdomen was much ſwelled, and her extremities became cold. The wound however was ſoon afterwards united, but the involuntary flux of urine continued occaſionally for ſome days; ſoon afterwards with the aſſiſ-

tance

tance of a bandage, ſhe was capable of walking, and on the 60th day from the operation, went to the college of phyſicians. No inconvenience now remained, unleſs that while walking or ſtanding her urine came away involuntarily, but even this inconvenience rarely happened while ſhe continued ſitting.

Such is the deſcription of the circumſtances, the ſymptoms, and event of the firſt performance of the ſection of the ſymphyſis pubis, an operation that was to be regarded as one of thoſe great and important diſcoveries, which was to conſtitute an *epoch* in the records of medicine, to be commemorated by a *medal*, and rewarded with a *penſion!*

I have ventured to call Souchot's caſe a "hair-breadth 'ſcape;" the preceding hiſtory of her caſe, and the expreſs words of Monſ. le Roy fully prove it. I have likewiſe ventured to ſay, that although the ſymptoms in general were

too

too minutely detailed, many particular and eſſential ones were inaccurately ſtated, or ſlurred over, as if not well underſtood in their probable conſequences, or otherwiſe meant to be ſecreted from the attention of the reader. In confirmation of this aſſertion, I have ſcarce the ſmalleſt doubt remaining, but that inflammation to ſuch a degree did really take place in the Veſica urinaria, as to end in gangrene and ſlough; and that the diſcharge which was ſo profuſe, and by chemical analyſis found to be urine, paſſed through the opening ſo made, and not by the urethra. The preceding ſymptoms, the black appearance of the dreſſings on the ſeventh day, and the manner in which the diſcharge then came off, ſo unlike the uſual way of urine paſſing thro' the urethra, and indeed, ſo unlike the manner in which it came away before that day, afford together the ſtrongeſt ſuſpicion, if not abſolute conviction, that a gangrene of the bladder did then actually take place.

place. Of this, there is not the ſlighteſt hint, or even ſuſpicion in any account of the caſe, altho' the probability of injury to the bladder, conſtitutes a priori, the moſt obvious and moſt powerful objection againſt the operation itſelf; and this grievous conſequence therefore might reaſonably have been expected.

Soon after Monſ. Sigault's memoire and account of the operation had been publiſhed at the expence of the college, Monſ. Piet, a Surgeon at Paris, practiſing midwifery, Conſeiller de l'Academie royal de Chirurgie, and who had been preſent at the preceding delivery of Mrs. Souchot, among a great number of other accoucheurs, publiſhed a pamphlet*, in " which he is ſtrenuouſly againſt the operation, ſtating " que cette ſection " nouvelle ne peut produire le plus " leger avantage ſans cauſer des grands " deſordres; que ſi elle n'a pas été " plus funeſte a la femme Souchot,

* Reflexions ſur le Section de le Symphyſe du Pubis. La Haye & Paris, 1778.

" c'eſt

" c'eſt qu'elle lui etoit inutile; &
" qu'enfin l'etat de cette femme n'eſt
" pas, a beaucoup pres, auſſi ſatisfai-
" ſant qu'on la publié*."

One of the moſt material obſervations Monſ. Piet makes, is the reſult of an experiment on a dead body; where the oſſa pubis being divided two inches or twenty-four lines, the ſmall diameter of the pelvis was very little increaſed, and yet the illia were ſeparated from the ſacrum three lines and a half, great part of the ligaments were lacerated, and the reſt much ſtretched. He ſays, you can only gain three lines from the pubis to the ſacrum by the ſection; therefore where the Cæſarian operation is required in conſequence of the ſmall diameter being contracted, the ſection will not ſucceed; and wherever it will, he thinks the forceps may. Monſ. Piet farther ſtates, that the children of Souchot in her former labours were large, while

* P. 309.

the

the child of which ſhe was delivered by the diviſion of the ſymphyſis, was ſo ſmall as to have eaſily been extracted with the forceps; he further obſerves, that the remaining fiſtula of the bladder, which (by the by) fully confirms my ſuſpicion of the injury done to that part, and her difficulty in walking afterwards, were ſufficient proofs that the cure was far from being compleat.

Before I quit Monſ. Piet, I muſt beg leave to make an extract, connected with this ſubject, if not immediately and directly applicable to this place. Monſ. Piet ſays†, "Graces au recherches et à "l'experience des accoucheurs mo- "dernes, il y a un moyen bien plus "doux qu'une ſection pour extraire "l'enfant, et qu'on peut aller ſaiſir la "tête *au detroit ſuperieure*, & *amener* "*l'enfant vivant & ſans le moindre le-* "*ſion*."

It is reaſonable to conclude, that this opinion prevails univerſally in France

† P. 14.

from the following expreſſion of Monſ. Sue, upon quoting the above paſſage from Piet, " Cette heureuſe decouverte " n'appartenant pas plus *à un accou-* " *cheur qu'a un autre* * ; if this is meant to refer either to the uſe of the forceps or vectis, or of any other contrivance, before the head of the child has entered the brim of a well-formed pelvis ; or to the poſſibility of bringing by any means a living child, at full maturity and of the ordinary ſize, through a contracted or deformed pelvis, like Souchot's, this aſſertion preſents to us no very favourable idea of modern ſcience, or modern practice in France, for the firſt is unneceſſary, and the attempt not without great danger, while the laſt is abſolutely and utterly impracticable.

In the following year Monſ. Alphonſe Le Roy, thought proper to favour the public with his account of this operation, and his opinion of the

* Eſſais hiſtoriques, &c. ſur l'Art des Accouchemens. Tom. I. P. 315.

ge-

general merit of the practice†. Monſ. Le Roy was probably envious of the high rewards granted to Monſ. Sigault, and the pre-eminent ſtation aſſigned to his colleague by the deſcription upon the medal, expreſsly declaring, that he has not had his due ſhare of reputation*.

Monſ. Le Roy appears deeply tinctured with enthuſiaſm, conſiders the diviſion of the ſymphyſis as the greateſt diſcovery of the preſent age, is outrageouſly angry with Monſ. Piet for daring to ſpeak diſreſpectfully of this operation, and expreſsly ſays of his pamphlet, "Ce "titre n'eſt qu'un voile que cache *tout* "*la malignité poſſible.*"

† Recherches hiſtoriques & pratiques ſur la ſection de la Symphyſe de Pubis pratiquée ſur la femme Souchot, &c. Paris, 1777. This enquiry has been tranſlated, I think very faithfully by Mr. Poignand, and publiſhed here, and therefore I ſhall be very ſhort in my account of it.

* In confirmation, Monſ. Rouſſel expreſſes himſelf in his account of Monſ. Le Roy's book, in the following words, "Quanquam quæſtionem ſat enucle-"atè, perſcrutatus ſit, hæc tamen in eum incre-"pantur, quod nempe collegæ ſuo M. Sigault, ſoli "inventori, & actori ſoli, cuncta prope detraxerit, "*quæ in ſe, laudis & gloriæ ultra modum cupidus, in-*"*vidioſe refunderet.*" Lib. citat. p. 104.

Monſ. Le Roy enters very fully into the enquiry, ſo often, and as yet however ſo unſatisfactorily inſtituted, viz. whether the junctions of the bones of the pelvis actually relax and ſtretch ſo as to enlarge its capacity during parturition. He is ſtrenuouſly on the affirmative ſide, quotes all the authorities from Hippocrates and Avicenna to Jaques d'Amboiſe in the ſixteenth century, to Pinæus, Riolanus, and all the later authorities.

Monſ. Le Roy afterwards endeavours to account for the alleged fact in the moſt whimſical manner, by ſuppoſing that a partial ſolution of the bones about the pelvis takes place, and that the earthy part of thoſe bones is converted to the uſe of the fœtus||. An obſervation too obvious to eſcape the moſt ſuperficial reaſoner, offers an inſuperable objection to this

|| " qu'il-ſe fait pendant la groſſeſſe, ſur tout du coté " du baſſin, une diſſolution du principe ſolidifiant de " la mere, *au profit de fœtus.*"

opi-

opinion, viz. that the change produced in the ſtate of the pelvis only commences at the approach of labour, when the fœtus is already completely formed; the final cauſe therefore aſſigned to this ſuppoſed ſolution of the bones muſt be ill founded. Beſides, the bones of the pelvis are never found ſoftened, and admitting as a fact, that the cartilages and ligaments are ſo, they are invariably reſtored to their priſtine ſtate of ſtrength very ſoon after delivery, which could not poſſibly happen, had they been actually deprived of their "*principe ſolidifiant.*"

Monſ. Le Roy then enters into a minute and tedious detail of Mrs. Souchot's caſe, corrects ſome miſtakes in the manner of performing the operation and ſubſequent treatment, quotes two other ſucceſsful caſes in confirmation of the utility of this practice, which will be noticed in another ſection; and then

concludes with an opinion ſenſibly and modeſtly expreſſed, that this operation may (when required) be ſeveral times repeated on the ſame patient, with efficacy and ſafety.

SECTION

SECTION III.

SOON after the publication of Monſ. le Roy's *Recherches, &c.* and about a year after the firſt operation, Dr. Hunter favoured the world with his reflections on this ſubject, they were publiſhed in addition to Dr. Vaughan's account of the Cæſarian operation, which had lately been performed at Leiceſter.

I have in a former place expreſſed my opinion and general approbation of the intention and effect of thoſe reflections, but I then ſtated that Dr. Hunter had deſcribed a caſe, where he thinks, the diviſion of the ſymphyſis pubis might be a conſiderable improvement; and that one purpoſe of the preſent publication, was in the firſt inſtance, to enquire,

whether the caſe, qualified by the circumſtances Dr. Hunter deſcribes, or ſuppoſes, ever does, or can exiſt; and afterwards to endeavour to prove, that if ſuch a caſe ſhould really happen, this operation never can be applied to its relief, with efficacy and ſafety; and thus I hoped to prevent the influence ſuch opinion and authority might otherwiſe juſtly be entitled to, in this country.

After ſtating his reaſons for preferring the uſe of the crochet, to the diviſion of the ſymphyſis pubis, and ſaying that nothing but the intereſts of humanity, had urged him to conſider this ſubject, Dr. Hunter proceeds thus, "I muſt add after "all, that the ſection of the ſymphyſis, "may poſſibly be found to be a much "better reſource, than the Cæſarian "operation, in a very few rare caſes, "not to ſave the child, but to ſave the "mother, which I think a much "greater object;" and again, "but "ſuppoſing a caſe where no ſucceſs can "be expected from the crotchet, either

"on

" on account of the extraordinary nar-
" rowneſs of the pelvis, or partly from
" that circumſtance, and partly from a
" great projection of the lumbar verte-
" bra, over the cavity of the pelvis,
" hardly allowing any part of the child,
" to come within the ſafe reach of the
" crotchet, in ſuch a caſe, inſtead of
" the Cæſarian ſection, which is dread-
" ful, becauſe ſo generally fatal to the
" mother; this new operation may be
" found to *give the mother a good*
" *chance for life, and tolerable health,*
" if it will make room ſufficient for
" bringing the child within the ſphere
" of the crotchet. This, though it
" could only be adviſible in exceeding
" few caſes, *might be a conſiderable*
" *improvement*, becauſe it would have
" the advantage over the Cæſarian ope-
" ration, of ſaving the mother, inſtead
" of the child*."

* P. 36, 37.

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The whole contents of this quotation are founded on a ſuppoſed caſe, which I believe never did, or can happen. I am perſuaded there never exiſted a pregnant woman, with a pelvis ſo ſmall, and its cavity ſo contracted, or its upper aperture ſo much leſſened, by the projection of the laſt lumbar vertebra, as not to allow the child to come "with-"in the ſafe reach of the crotchet;" but admitting the fact poſſible, I am convinced that no additional ſpace, which could be gained, by the diviſion of the ſymphyſis, "will make "room ſufficient, in ſuch a pelvis, "to bring the child, within the "*ſafe reach*, or *ſphere of the crot-*"*chet.*" The ſpace gained from pubis to ſacrum by the diviſion of the ſymphyſis, may be about four lines, or one third of an inch at moſt, and to procure even that ſpace, the oſſa pubis muſt be ſeparated compleatly, two inches and a half. Wherever the pelvis is ſo very ſmall, that the Cæſarian operation

ration, according to Dr. Hunter's opinion, would have become neceſſary; it is clearly impoſſible, that the additional ſpace of four lines, ſhould render delivery by the crotchet, either ſafe, or practicable.

But when we advert to the maimed and weakened ſtate of the pelvis, and its conſequent inability after the diviſion of the ſymphyſis, to ſuſtain the violence and repeated exertions, unavoidable in the uſe of the crotchet; and at the ſame time, when we reflect upon the miſchief, that the ſoft parts muſt inevitably ſuffer from the diviſion, particularly thoſe which lie immediately behind, and in contact with the oſſa pubis; firſt, by being torn from the bones to which they are naturally connected, afterwards, by being expoſed for a conſiderable time to the external air, and laſt of all, by being preſſed againſt the divided edges of the bones, in the paſſage of the child's head; when, I ſay, all theſe circumſtances are conſidered,

we

we muſt conclude, that the operation in the caſe ſuppoſed by Dr. Hunter, inſtead of "*giving the mother a good* "*chance for life, and tolerable health,*" will be as certainly fatal to her, as the crotchet muſt have already proved to the child. The difficulty and extreme danger of this particular ſituation, tho' moſt reaſonably to be expected, do not however reſt upon aſſertion, conjecture, or opinion; Profeſſor Guerard's caſe (to be related by and by) is exactly in point, and confirms by experiment, what was to be expected a priori. The child's head in that caſe was opened, after the diviſion of the ſymphyſis had been performed, but the profeſſor was, notwithſtanding, foiled in every attempt to deliver, both by the forceps, and crotchet, and the event in the end proved fatal to the mother*. Yet this unfortunate woman's pelvis, meaſured *two inches and a half*, from pubis

* "In tantis rerum anguſtiis, ad ultimum tam diu "confugerunt remedium, perforarunt nimirum cra- "nium

pubis to ſacrum, dimenſions by no means requiring either the Cæſarian operation, or the ſection of the ſymphyſis. The event of this caſe demonſtrates a fortiori, the danger and inefficacy of the practice in Dr. Hunter's ſuppoſed caſe, or where the pelvis is ſo ſmall as to require the Cæſarian operation. It may likewiſe not be improper to add, that the diameter from pubis to ſacrum was in this caſe only increaſed *two lines* by the ſeparation of the oſſa pubis†.

To divide the ſymphyſis pubis, merely to make room to deſtroy the child, and afterwards extract it with the crotchet, is to defeat the very end and intention of the operation, and to deprive it of the

" nium magno negotio, effluente cerebro cranium " paululum magis decendebat, unci applicatio locum " non habebat nec non etiam forceps, & licet quidem " oſſa quædam obripiebantur, *caput tamen ſemper* " *manebat immotum.*" Guerard. lib. citat. p. 14.

† " Pelvis diametri nunc accuratius luſtrare vale- " bant & quidem conjugata naturalis erat $2\frac{1}{2}$ pollicum " Paris. Eadem diameter ducta promontoreo oſſis " ſacri ad pubis oſſa a ſe invicem remota, *duabus* " *ſolumodo lineis erat major.*"

only

only ſpecious, the only poſſible excuſe, that can be made for it; it is to expoſe the mother to great pain, and extreme danger, without neceſſity, and without even the poſſibility of an equivalent. Notwithſtanding the reſpect I always entertain for Dr. Hunter's opinion, and the diffidence of my own on the compariſon, I cannot in this inſtance but highly diſapprove of that trifling and unmanly want of deciſion, which, while it reprobates the operation upon the principles and with the view which originally gave riſe to it, unaccountably ſubſtitutes an imaginary neceſſity, in order to recommend that practice as a "conſiderable improvement," which I am bold to ſay, *no circumſtance whatſoever, real or imaginary*, can even render a warrantable operation.

I cannot conclude the review of Dr. Hunter's reflexions on this ſubject, without expreſſing my aſtoniſhment, that a man of his extenſive knowledge and exceſſive caution, ſhould not have been aware

aware of the injury the ſoft parts might ſuffer in this operation, although ſuch injury ſeemed obviouſly to be expected a priori, and has been uniformly to a certain degree, and in many inſtances, even fatally confirmed by experience.

Monſ. Rouſſel de Vauzeſme † in the following year publiſhed a Theſis which he had before defended in the ſchools at Paris. As it contains a very particular and circumſtantial account of the operation, and an hiſtorical detail of its progreſs, and ſucceſs, as well as much other curious matter, I hope to be excuſed for being very particular in my analyſis of it.

Monſ. Rouſſel ſeems to have entertained the moſt extravagant, and the moſt prepoſterous opinion of the benefit, which was in future to be derived to ſociety by this invention; he has even exceeded the Faculté de la Medicine in expreſſions of enthuſiaſm, for he ſets out with directly, or obliquely com-

† De Sectione Symphyſeos oſſium pubis admittenda. Paris 1778.

paring

paring it to ſome of thoſe great diſcoveries, which have ſo rarely happened, as to form epochs even in the hiſtory of the world.

He ſlightly and indeed only obliquely mentions *Columbus*, and particularly the ſeverity of treatment he experienced after his ſingular diſcovery of America, but immediately adds, "Erras gra-" viter ſi ſectionis ſymphyſeos actorem, " *gloriæ inventionis* ſecure potitum cre-" dideris." He then deſcribes and reprobates the various and improper means uſed by the adverſaries in depreciating this great diſcovery; and then adds, "Nil mirum eadem *omnes cla-*" *rorum inventorum* auctores ſors ma-" net," and in direct words compares the treatment of Monſ. Sigault, with the ſuppoſed treatment of *Harvey* on his diſcovery of the circulation.

He next endeavours to reſcue the fame of Monſ. Sigault from the envy of the preſent generation, and to reſt it on the opinion of poſterity, when, as he

he expreſſes it, " quem merito *apud* " *ultimos ſemper collaudandum* conjici- " mus," and after ſtating that ſome foreign ſocieties have adopted the operation in conformity with the Faculté de la Medicine at Paris, he prothetically exclaims " non longam poſt clapſam an- " norum ſeriem, *inter operationes ma-* " *xime ſalutiferas* annumeretur." The whole preface is the moſt curious compoſition of extravagance of ſentiment and expreſſion, that the moſt ingenious in the art of puffing, (even in that country) can combine together.

Monſ. Rouſſel de Vauzeſme arranges his matter in five diſtinct chapters. In the firſt he gives only a ſhort deſcription of the child's head, the pelvis, and a view of natural labour; corrects ſome miſtakes both of the ancients and moderns, congratulates the world on the diſcovery of this operation, and promiſes to ſhew how nature pointed it out to the diſcoverer.

In the next chapter, with becoming induſtry, he collects all the authorities both ancient and modern, and with conſiderable ability demonſtrates, as he ſuppoſes, that the cartilages and ligaments of the pelvis ſwell and relax during geſtation; and by that means the capacity of the pelvis is enlarged to a uſeful degree in parturition. To account for this effect ſatisfactorily, he adopts the following whimſical opinion of Monſ. Le Roy*, viz. "that during geſtation, nature ſeems to produce a ſolution of that principle which gives ſolidity and firmneſs to the body, particularly to the bones and cartilages of the pelvis." He then reverts to all the more ancient, and many modern authors, particularly to Monſ. Bertin, as the lateſt and higheſt authority; and after expreſſing much ſurprize, that no perſon who had acknowledged this fact, ſhould have thought of

* "Eo tunc tempore *principii ſolidificantis* ſolutionem moliri natura videtur." P. 39.

aſ-

aſſiſting nature's endeavours by the ſame means, he at length arrives at the ſummit of his complimentary climax in the following words, which I muſt beg leave to repeat, " At tandem Cl. Sigault, D. " M. P. hæc alta mente diu revolvens " *ſolus divino quaſi afflatus numine* quam " monſtrarat natura viam ingreditur," and concludes the chapter with an account of Monſ. Sigault's propoſal to the Royal Academy, their rejection of it, Monſ. Le Roy's adoption, &c. all of which have been related before.

In the third chapter he ſays, that when the deformity of the pelvis is diſcovered in time to be certainly ſuch, as that a child at full maturity cannot be extracted through it with ſafety; he thinks premature labour may be brought on in the ſeventh or eighth month, in the ſame manner as has been recommended in uterine hæmorrhages*, by Puzos, Trautmann, &c. and which

* Page 68.

he further ſays, has been practiſed with ſucceſs, to prevent the Cæſarian operation in a very ſmall pelvis by Monſ. Vacher de la Feutrie. But he adds, "if utero "geſtation is advanced to the ninth "month before the deformity be diſco-"vered, in that caſe, the ſection of the "ſymphyſis pubis is to be immediately "reſorted to as the *only remedy*." He next endeavours to aſcertain what are the dimenſions of the pelvis which require this operation, becauſe not admitting aſſiſtance either from the vectis, or forceps; and he ſtates the diſtance of two inches and a half from pubis to ſacrum, as the preciſe dimenſions, for this reaſon; becauſe immediately upon dividing the ſymphyſis, the two oſſa pubis will ſeparate *two inches and a half*, and by ſuch a ſeparation the ſhort diameter of the pelvis from pubis to ſacrum will be enlarged *ſix or ſeven lines*; and he thinks ſuch an additional ſpace will be ſufficient to permit any living child to paſs through, or at leaſt, that a conſiderable

por-

portion of the head may be ſqueezed into the opening between the divided oſſa pubis, and thus "quaſi *per viam* "*regiam & patentem* felicius erumpet "infans. He then deſcribes a genuine *enclavement*, where the head of the child having entered the brim of the pelvis is ſo impacted in the cavity that it can neither deſcend, nor be puſhed up; in this caſe, after the forceps have failed, he recommends the ſection in preference to the crotchet, calling it "*ſola ſalutis anchora*," and adds "hæc "*ſola vincit, triumphat**."

After allowing however that in monſters, in extra-uterine conceptions, &c. the Cæſarian operation may be done, he expreſſes his earneſt wiſhes that it might be altogether expelled from the preſent practice, "Nos modo in votis vehe-"mentur habemus ut oblivione fere "perpetua jaceat hæc operatio," and both in the text, and the notes he contraſts

* Page 78.

the fatal conſequences of the Cæſarian operation with the mild and beneficial effects of his "*ſimpliciſſima & tutiſſima* "ſimul ſectio ſymphyſeos." He concludes the chapter with the uſual extravagance of expreſſion, ſaying, that now all women "*nec ægre, nec peri-* "*culoſo, divinitus miſſæ* ſectionis ſym- "phyſeos auxilio parturire potuiſſunt‖."

The fourth chapter contains the method of performing the operation, which being exactly the ſame as before deſcribed, it is unneceſſary to repeat; except indeed, that he adviſes, what to me ſeems altogether unneceſſary, viz. that two aſſiſtants ſhould lay their right hands firmly on the illia, to prevent the violent and ſudden ſeparation, which might otherwiſe rupture the anterior ſacro-illiac ligaments; an accident, he ſays, much apprehended by the *Cæſarians*. The delivery is thus accompliſhed in a few minutes, by his account, *with-*

‖ P. 83.

out

out pain, and *without danger*. He adds, that perhaps one of the crura clitorides may be cut, but that neither the bladder or meatus need be touched, nor any large veſſels or nerves neceſſarily wounded; he then exultingly aſks, "quid "igitur peracta, *pertimeſcendum? Do-* "*lores, rupturas, effuſiones, inflamma-* "*tiones, coalitus impoſſibilitatem, deluſæ* "*imaginationis phantaſmata vere dixe-* "*rim.*" And if any other imaginary dangers alarm, he boldly appeals to experience, as "*rerum potior magiſtra,*" to diſpel them. How far thoſe alarming ſymptoms juſt deſcribed by Monſ. Rouſſel, are to be conſidered as "*deluſæ* "*imaginis phantaſmata,*" and how far experience, his "*rerum potior magiſtra*" will ſtand him in any eſſential ſtead to eſtabliſh his doctrine, or even juſtify his confident appeal to her, the fatal event of ſeveral caſes to be preſently recited, will too ſatisfactorily demonſtrate!

Monſ. Rouſſel next deſcribes the particulars of Mrs. Souchot's caſe as already detailed. He then ſtates, that the operation has been performed ten times, and adds "*Huc uſque res proſpere "cedentes, jam inventionis eximiæ invi- "dis aut aſſenſum, aut ſilentium impe- "rant**." And in a note he deſcribes all theſe caſes, ſome in a very accurate manner, while others are only ſlightly mentioned. But the hiſtory and event of thoſe caſes belong to another ſection, where I purpoſe to collect together all the facts which have come to my knowledge.

Monſ. Rouſſel farther ventures to prognoſticate, that the operation may *without danger* be repeated two, three, or even more times on the ſame patient.

The laſt chapter is only a compendious recapitulation of the contents, but with ſome expreſſions which ought not to paſs unnoticed. After repeating again the circumſtances requiring

* Page 96.

the

the Cæsarian operation, and giving the preference to the division of the symphysis, and applying to the event of Souchot's case, and the repeated experiments successfully made in various countries, he emphatically exhorts, "Nova igitur "in promptuarium artis accipiatur ope- "ratio quæ *cito* & *tuto* perficitur, quam "ipsamet *natura commonstrat, expostulat,* "*adjuvat*; quæ fœtum in auras vitales "evocat, *nullo parturientis discrimine**, *&c.* and again repeats "that nature † "points out this operation, and that "experience by the *happiest effects, has* "*confirmed its utility.*"

Such are the chief contents of Monsr. Rousselʼs book, which I must confess is the defence of an able advocate, who avails himself of all sorts of means in favour of his client, and a bad cause, and who makes ample amends for every deficiency of proof, by bold assertions, and panygerical declamation. For

* Page 110. † Page 111.

were

were all his extravagant accounts of the beneficial effects of this new-fangled operation to be collected together, and considered as genuine evidence, it would be the *safest*, *easiest*, and *most perfect remedy* ever invented by the ingenuity of man.

SECTION

SECTION IV.

DR. J. C. Loder, Profeſſor of Anatomy, Midwifery, &c. at Jena, and who is at preſent in London, has been ſo obliging as to favour me with his Diſſertation * on this ſubject. It is a very able and ingenious defence of this operation, founded upon theory, and a very accurate anatomical knowledge of the parts concerned. But the profeſſor, never having performed the operation, and of courſe not knowing the material objections from experience, I truſt his

* I had before ſeen an abſtract of it in the New Bibliotheca Chirurgica publiſhed by S. H. de Vigiliis Von Creutzenfeld in 1781 at Vienna, which he had taken from Richter's Chirurg. Bibl. where it had been highly recommended as an accurate treatiſe on the ſubject.

can-

candour will not permit him to expect much reſpect to be paid to his theoretical recommendation at this time, when the operation has been tried between twenty and thirty times, under all the real and different circumſtances, ſuppoſed by the partiſans to require and juſtify it.

Profeſſor Loder ſeems to have entertained the ſame unaccountable predilection for this new operation, that all the other early partiſans did, and which firſt induced him to adopt the ſame extravagant expreſſions, as "primo inde tempore quo mihi innotuit, *utiliſſimis noſtri ævi inventis* adnumerandum eſſe cenſui," adding "& nunc minime dubia aliorum experientia confirmatus methodi hujus *præſtantiam*, quantum†, &c. and which afterwards prevented him from ſuppoſing any danger could happen from it; or otherwiſe he certainly would not have recommended it in the following manner, inſtead of the forceps; after quoting from Stein an opinion, that the Cæſarian operation is always ne-

† P. 34.

neceſſary when the ſmall diameter of the pelvis does not exceed three inches, he adds, " Nec ubi tres pollices & di-
" midium, minor pelvis diameter æquet,
" forcipi locum eſſe credimus, *ſed po-*
" *tius ſynchondroſeos diſſectionem commen-*
" *damus.*" And he afterwards ſpeaks of the *febricula* only, which may ſucceed the operation. He then recites Monſ. Sigault's and Profeſſor Seibold's caſes, and which he thinks combined with Camper's experiments: " Satis demonſtrant,
" quantum utilitatem oſtendat Sigaul-
" tiana ſectio, quibus in caſibus præ-
" cepue *commendanda ſit, quantiſque lau-*
" *dibus extollendus ſit ejus inventor quem,*
" *ſi qua meritorum juſta ſit æſtimatio,*
" *humanum genus hac iſta privare ne-*
" *quit.*"

Dr. Emanuel Bentely choſe this opetion † for the ſubject of his inaugural Theſis, when he graduated at Straſburg, in the year 1779.

† De Sectione Synchondroſeos Oſſium Pubis.

Dr.

Dr. Bentely begins with a minute and accurate deſcription of the union of the bones of the pelvis; he particularly endeavours to aſcertain that the intervening cartilages differ from the cartilages placed between the vertebræ of the ſpine; and after deſcribing all the ligaments which unite the bones of the pelvis, from Weitbreght's Syndeſmologia, he recites the arguments and authorities for the bones ſeparating in labour, upon which this operation was firſt founded. He is diſpoſed to believe, that although the oſſa pubis may be ſeparated one inch and a half, or even two inches, yet the ſpace gained in the diameter from pubis to ſacrum will never exceed four lines. To aſcertain that fact he holds to be of the firſt importance, towards determining the merit of the operation, and therefore gives eleven experiments; five made by Ripping, in the Hotel Dieu at Paris; and ſix by Profeſſor Lobſtein at Straſburg, all of which appear to have been accurately made and faithfully deſcribed.

ſcribed. In the five experiments made by Monſ. Ripping†, he never gained quite four lines from pubis to ſacrum; and in the ſix experiments made by Profeſſor Lobſtein, it appears, that in one only he gained three lines, and in that caſe the oſſa pubis were ſeparated two inches and a quarter; but that by extreme violence ſeparating them three inches, he gained ſix lines or half an inch, but then he obſerves, all the ſoft parts attached to the arch of the pelvis were torn open, as well as the ligamentoſe membrane uniting the illia and ſacrum. Two of theſe experiments being made on the bodies of women, one of whom died in child-bed, and the other during utero-geſtation, and therefore in point, I have ſubjoined below the whole deſcrip-tion of them, not only to prevent any miſtake, but likewiſe as a ſatisfactory ſpecimen of the accurate manner in which they are made*.

Dr.

† Ripping Diſſert. ſiſtens quaſdem de Pelvi animadverſiones. Ludg. Batav. 1776.

* " In fœmina 22 circiter annorum, ſexto fere menſe " graviditatis, hydrope mortua ſtatim poſt mortem ſec-

Dr. Bentely recites all the common objections to this operation, ſuch as the dif-

" ſectio Cæſarea inſtituebatur, fœtus autem jamjam
" mortuus extrahebatur; quo facto dein ſymphyſin
" oſſium pubis luſtrando, eorum oſſium mobilitas clare
" obſervabatur.

" Facta nunc ſectione oſſium pubis abſque ulla le-
" ſione partium ſubjacentium, pubis oſſa ſponte a ſe
" invicem ſecedebant 4 lin.

" Levi femorum diductione ad 1 poll. $4\frac{1}{2}$ lin.

" Majori diductione = 2 poll. 4 lin.

" Partes tunc ſubtus jacentes in extremo fiſſionis
" periculo verſabantur.

" Aperto cadavere diametri naturales pubis oſſibus
" ad ſe invicem adductis tales erant.

" In apertura ſuperiori.

" Conjugata = 3 poll. 9 lin.

" Tranſverſa = 5 poll. 1 lin.

" Obliqua = 4 poll. 8 lin.

" In apertura inferiori.

" Tranſverſa = 3 poll. 11 lin.

" Diductis pubis oſſibus ad 2 poll. 3 lin.

" Diametri tunc ſic ſeſe habebant.

" In apertura ſuperiori.

" Conjugata = 4 poll.

" Tranſverſa = 5 poll. 6 lin.

" Obliqua = 5 poll. 6 lin.

" In apertura inferiori.

" Tranſverſa = 4 poll. 11 lin.

" Diductis pubis oſſibus ad 3 poll.

" Diametri erant in apertura ſuperiori.

Con-

difficulty and danger of the ſection, the injury likely to enſue to the ſacro-illiac joints,

" Conjugata = 4 poll. 3 lin.
" Tranſverſa = 5 poll. 9 lin.
" In apertura inferiori.
" Tranſverſa = 5 poll. 3 lin.
" Diſruptæ autem tunc reperiebantur hinc inde
" partes molles arcui oſſium pubis ſubjacentes, nec
" non etiam membrana illa ligamentoſa ſynchondroſin
" ſacro-iliacam intus in pelvis cavo obvolvens.

" Inſtitutum fuit in puerpera octavo die poſt par-
" tum mortua.
" Diametri naturales erant ſequentes.
" In apertura ſuperiori.
" Conjugata = 3 poll. 10 lin.
" Tranſverſa = 5 poll. 3 lin.
" In apertura inferiori.
" Tranſverſa = 4 poll. 6 lin.
" Facta ſectione, diductiſque pubis oſſibus ad 1 poll.
" Conjugata erat = 3 poll. 11 lin.
" Tranſverſa = 5 poll. 8 lin.
" In apertura inferiori.
" Tranſverſa = 5 poll. 4 lin.
" Diductis pubis oſſibus ad $1\frac{1}{2}$ poll.
" Conjugata erat = 3 poll. $11\frac{1}{2}$ lin.
" Tranſverſa = 5 poll. 9 lin.
" In inferiori apertura.
" Tranſverſa = 5 poll. $8\frac{1}{2}$ lin.
" Diductis pubis oſſibus ad 2 poll.

" In

joints, the conſequent inſtability of the body, from the weakneſs of thoſe joints and of the ſymphyſis pubis, particularly the latter, which Ripping relates, continued till death, in all the dogs except one, that were the ſubjects of his experiments. I have quoted the paſſage below, from Bentely, as I have not been able to procure Ripping's diſſertation†. He far-

" In apertura ſuperiori.
" Conjugata erat = 4 poll. 1 lin.
" Tranſverſa = 5 poll. 10 lin.
" In apertura inferiori.
" Tranſverſa = 5 poll. 11 lin.
" Remotis pubis oſſibus ad 2½ poll.
" In apertura ſuperiori erat:
" Conjugata = 4 poll. 2 lin.
" Tranſverſa = 6 poll. 2 lin.
" In inferiori apertura.
" Tranſverſa = 6 poll. 4 lin.
" Oſſa innominata pro ratione diductionis oſſium
" pubis etiam ab oſſe ſacro in antica ſui parte
" ſecedebant ſeſeque ab illo ſeparabant."

† " prouti Ripping (Diſſ. cit. § 36, p. 38) ob-
" ſervavit in canibus huicce operationi propoſitis, in
" quibus ſanatio facta fuit ope ſubſtantiæ ligamentoſæ
" ab exteriori & inferiori parte hanc ſynchondroſin
" uni-

farther thinks, that if in the operation, either the cartilages or the bones be wounded, and the parts are to be made whole by ſuppuration taking place, and callus forming; it is highly probable that a caries of the bones will enſue, and that the wound will remain *fiſtuloſe*, as was really the caſe with the woman at Wurtzburg, for near a year after the operation. The union of the bones is greatly prevented, he ſays, from the difficulty of keeping them without motion a proper time; for the abdominal muſcles being inſerted into the oſſa pubis, the ſlighteſt motion of theſe, muſt move one or other of the divided bones. He concludes by ſaying, that where the contraction of the upper aperture of the diameter from pubis to ſacrum, is ſuch as to require the Cæſarian operation, the ſmall ſpace of *three or four lines*,

" unientis, intermedio nulla ſubſtantia repleto, ſyn-
" chondroſis etiam ſemper erat *mobilis uſque ad ne-*
" *cem*, dum nunquam niſi *in uno*, in quo nempe oſ-
" ſeam ſubſtantiam læſerat, calli veſtigium offende-
" rit." ſect. LVII. p. 61.

which is all that can be gained by the diviſion, will never be ſufficient to anſwer the purpoſe of that operation. If the contraction be at the lower aperture, and a ſufficient ſpace could be certainly procured by it, yet the dangers and difficulties attending it are ſuch as to render the event very doubtful.

In the ſame year, 1779, Dr. J. P. Weidmann publiſhed his theſis at Wurtzburg in Germany *. He was led to chuſe this ſubject, partly from its novelty, and importance, but principally, as he ſays, from having fortunately had an opportunity of ſeeing, both the Cæſarian operation, and the diviſion of the ſymphyſis performed by the Preſident Seibold, whoſe caſe of the latter operation we ſhall have occaſion to take more particular notice of, by and by.

Dr. Weidmann, with great modeſty, ſays, he does not pretend, abſolutely to

* "Comparatio inter ſectionem Cæſariam, & diſ-
"ſectionem cartilaginis & ligamentorum pelvis, in
"partu ab pelvis anguſtiam impoſſibili, ſuſcipien-
"das." Wirecburgi 1779.

de-

determine the merits of the two operations; he only means to offer the two caſes to the conſideration of his readers, to ſtate and compare the difficulties and dangers, the advantages and inconveniences of each operation, hoping, that ſome benefit may be thereby derived both to the profeſſion and to the public, and that abler and more experienced men, and of greater proficiency in the art, will beſtow their attention upon this ſubject, and that certain rules for preference may by that means be eſtabliſhed.

He firſt gives a ſhort hiſtorical detail of the Cæſarian operation, from the firſt performance by Nafer at Siegershauſen, as deſcribed by Caſpar Bauhin, in his Appendix to Rouſetus, even to the caſes which happened lately in this country. He then recites the particulars of a caſe where the Cæſarian operation was performed by the Preſident Seibold, at which he was preſent and acted as aſſiſtant, and where it ended fatally; he

accurately deſcribes the diſſection of the body, and particularly the dimenſions of the pelvis, by which it appears, there was a ſpace of *two inches and ſeven lines* from pubis to ſacrum. He afterwards gives a ſhort hiſtorical detail of the ſection of the ſymphyſis, in which he corrects ſome conſiderable miſtakes, in the account of two or three of the caſes to be related in the next ſection. He then deſcribes the Preſident Seibold's caſe of the diviſion of the ſymphyſis, at which he was likewiſe preſent, with every poſſible degree of accuracy, and even to a weariſome minuteneſs.

He thinks, that if the diviſion of the ſymphyſis ought ever to be performed, it is only where the diameter from pubis to ſacrum meaſures three inches, where the head preſents and is not very large; but even in that caſe, he aſks "whether it may not be better to bring on "labour at the ſeventh month? for by "that means leſs danger will be incurred by the mother, and probably the

"child

"child may be delivered alive." He ſays, the Cæſarian operation is indicated in every deformity, where a child cannot by any other means be certainly born alive, thus implying a moſt injudicious prejudice againſt the uſe of the crotchet, and to my comprehenſion, a moſt unwarrantable predilection for the child's ſafety in preference to the mother's, and which he further explains and enforces in his Poſitiones ex univerſa Medicina, at the end of his Theſis, by ſaying, "*In fetum vivum, uncas & per-*
"*foratoria adigere, nefandum facinus*
"*eſt*†.

While this operation engaged the attention of many ingenious men in Germany, it became a party affair at Paris, between the Faculté de la Medicine, and the Surgeons of that city, as ſtated by Monſ. Sue, who in taking a comprehenſive review of the ſubject from the firſt performance to the time

† P. 54.

he wrote, includes an account of Meſſ. Herritier, Etienne, Pellaton, &c. He particularly deſcribes and reprehends this diſpute, but diſapproves of the ridicule thrown upon it by an author of ſome wit, who in a letter from a ſuppoſed Counteſs propoſes to erect a Statue to Monſ. Sigault, " *Ce mortel le plus honoré, &* " *le plus feté, qui eut jamais eté**."

Monſ. Baudeloque † enters very fully into the examination of this ſubject, and relates the following obſervations, as the reſult of a number of experiments made in the Hotel Dieu.

After the diviſion of the ſymphyſis, when the thighs were moderately ſeparated, he ſays the two oſſa pubis were from three to ſix lines aſunder; and that the oſſa pubis never could be ſeparated two inches and half, without the thighs being brought to right an-

* Eſſais hiſtoriques ſur l'Art des Accouchemens, page 296.

† See l'Art des Accouchemens, Tom. 2, P. 230. Paris 1781.

gles

gles with the trunk; nor without laceration to the ſacro-illiac ligaments, which began earlier or later, according to the particular dimenſions of the pelvis. In one pelvis of three inches and a quarter diameter, from pubes to ſacrum, the oſſa pubis were not ſeparated one inch, before the ſacro-illiac ſymphyſes were opened, one a line and a half, the other a line; and when the oſſa pubis were ſeparated two inches and a half, one of them was open to five lines, and the other to three lines and half, and the perioſteum and ligaments were torn on both ſides. And he further obſerved, that the oſſa pubis never were equally removed, and hence the ſacro-illiac ſymphyſes were differently opened, from two to ſeven lines. He likewiſe ſays, whenever the external wound was two inches and half in extent, it was invariably torn both above and below, and ſometimes to ſeveral fingers breadth. He obſerves from the reſult of his experiments, that the ſhort

dia-

diameter is increaſed from four to ſix lines by a ſeparation of the oſſa pubis to two inches and half; a ſpace by no means ſufficient to make amends for the diſproportion between a child's head and dimenſions requiring the Cæſarian operation, eſpecially as the ſpace gained by it could only enlarge the tranſverſe diameter. Monſ. Baudeloque however allows, with the partiſans of the ſection, that a greater ſpace may be procured by it in a contracted than in a well-formed pelvis; and that if the ſmall diameter is not naturally more than fourteen or fifteen lines, he thinks nine lines may be gained, if the oſſa pubis are ſeparated two inches and half; but if the child's head is of the uſual ſize, the ſmall diameter from one parietal bone to the other is three inches and half, and thus there will ſtill remain fifteen or ſixteen lines more in the volume of the head, than in the capacity of the pelvis, of what eſ-

ſential

ſential uſe then, he aſks, can the operation be, even in that deformity?

He then endeavours to diſcredit Monſ. Le Roy's account of his operations, where, in one inſtance, he ſays, the ſide of the child's head, and in another, the occiput inſinuated itſelf into the opening of the ſymphyſis. He takes great pains to correct a miſtake that the partiſans of this operation have always made, by ſuppoſing, that when a certain ſpace was wanting to either diameter at the upper aperture of the pelvis, if that ſpace was gained, whether to the diameter wanting it, or the other, the benefit would be the ſame; but the fact he obſerves is undoubtedly otherwiſe, for no additional ſpace gained to the long diameter will at all make amends for a deficiency in the ſhort one, where it is only wanted. He ſeverely reprehends the Preſident Seibold for his reaſoning on the caſe where he performed this operation, particularly for acknowledging and regreting that he "*(un homme veritablement inſtruit)*" could

could not reſiſt the *allurements* of this new method of delivery. He next proves, that the two illia muſt be removed from the ſacrum, in proportion as the oſſa pubis ſeparate, except at the poſterior edge; and he then concludes that this edge, aſſiſted by the poſition of the body on a hard table, will preſs the os ſacrum inwards, and thus to a certain degree, this preſſure muſt have a tendency to leſſen the ſhort diameter. Monſ. Baudeloque after concluding the proofs of the inadequateneſs of the operation, to procure a ſufficient ſpace to anſwer the intended purpoſe, aſſures the moſt zealous friends and partiſans, (notwithſtanding Monſ. Le Roy's aſſertion) that * it is not prejudice, but conviction, which has induced him to take a decided part againſt this operation. He then accurately examines the ſucceſs of the caſes which had come to his knowledge; but that part falls into the intention of the next ſec-

* P. 254.

tion.

tion. Partly however to examine the effects of the operation in a pelvis of ſuch a degree of deformity as to require the Cæſarian operation; but eſpecially to diſcredit Monſ. Le Roy's caſe of Belloy (which will be more particularly conſidered by and by) Monſ. Baudeloque recites the following experiment, which though very long I hope to be excuſed, for tranſcribing as it is ſingularly and exactly in point, the woman having died after the Cæſarian operation.

" Cette expérience fut fait a l'Hôtel-
" Dieu de Paris, le 15 Août 1779, en
" préſence de M. Moreau, Chirurgien-
" Major dudit Hôpital, de MM. De-
" leurie, Coutuli, Trainel, L'héritier,
" Maîtres en Chirurgie, & d'un grand
" nombre d'éleves, ſur une femme qui
" étoit morte le onzieme jour après
" l'operation céſarienne, pratiquée à la
" ligne blanche. Cette femme étoit
" infiltrée: ce qui ne paroîtra pas in-
" different à obſerver, à cauſe du re-
" lachement des ſymphyſes.

" Le

" Le cadavre étant placé ſur le bord
" d'une table, les jambes écartées &
" ſoutenues, comme le recommandent
" les partiſans de la ſection du pubis,
" nous nous aſſurâmes, par divers pro-
" cédés, de la longueur du petit dia-
" metre du détroit ſupérieur, que nous
" n'évaluâmes qu'à *un pouce huit*
" *lignes :* on s'aſſura de ſuite, par le
" moyen du compas ordinaire rapporté
" au pied de Roi, qu'il n'avoit pas da-
" vantage, & que le diametre tranſver-
" ſal étoit de quatre pouces trois lignes.
" On prolongea ſupérieurement la plaie
" de l'opération céſarienne, afin d'enle-
" ver la matrice, & de pouvoir placer
" dans le bas-ventre un enfant dont on
" engagea les pieds dans le baſſin.
" La tête de cet enfant n'avoit que
" *trois pouces cinq à ſix lignes de dia-*
" *metre, dans ſa plus grande épaiſſeur*
" *tranſverſale,* & le tronc étoit très-
" maigre. Nous avions eu le ſoin d'en
" pétrir en quelque ſorte, toutes les
" parties, & ſur-tout la tête, pour leur
" ren-

" rendre la ſoupleſſe que la mort avoit
" pu leur enlever. On entreprit de
" tirer cet enfant par le pieds ; mais il
" fallut employer les plus grandes for-
" ces, pour faire paſſer les feſſes à tra-
" vers le détroit ſupérieur, quoique
" dans la direction la plus convenable,
" & pour y engager la poitrine juſqu'
" aux aiſſelles. Ce fut dans ce moment
" qu'on fit la ſection du pubis.

" On découvrit la ſymphyſe au mo-
" yen d'une inciſion de deux pouces &
" demi, conſervant en en-bas la com-
" miſſure antérieure des grandes levres ;
" & ſupérieurement une étendue au
" moins de dix-huit à vingt lignes, au-
" deſſous de l'angle inférieur de la plaie
" de l'opération céſarienne, qui étoit
" dans la même direction. On coupa
" la ſymphyſe avec les précautions re-
" quiſes, & les os pubis ne s'écarterent
" d'abord que de *neuf ligne*, malgré le
" coin que formoit en-dedans le corps
" de l'enfant. On augmenta cet é-
" cartement, le plus graduellement poſ-

" ſible,

" ſible, *juſqu'à vingt & une ligne*, en " éloignant les cuiſſes du ſujet: mais " pour le porter à deux pouces & demi, " il fallut tirer fortement ſur les han- " ches. Ce fut à ce dernier degré " qu'on eſſaya de faire paſſer la tête, " qui s'étoit placée d'elle-même dans " une direction tranſverſale, l'occiput " regardant le côté gauche du baſſin & " la face le côté droit; de maniere " qu'une des boſſes pariétales répondoit " à l'écartement des os pubis, & l'autre " à la partie latérale gauche de la ſaillie " du ſacrum; poſition ſans contredit, " la plus favorable à l'affaiſſement & au " paſſage de la tête.

" Pluſieurs perſonnes exercerent leurs " forces, ſucceſſivement, ſur le tronc " de l'enfant, & en tirant auſſi ſur la " mâchoire inférieure au moyen de " deux doigts introduits dans la bouche, " ſans pouvoir faire deſcendre la tête. " Après un quart-d'heure & plus de " tentatives inutiles, pendant qu'un de " mes confreres tiroit de toutes ſes

" forces

" forces ſur le corps de l'enfant, & un
" autre ſur les pieds, en obſervant la
" meilleure direction poſſible, j'ap-
" puyai fortement d'une main ſur la
" tête, en la comprimant ſelon ſon
" épaiſſeur tranſverſale, & en dirigeant
" mes efforts de maniere à faire deſcen-
" dre le menton: ce fut alors qu'elle
" franchit le détroit ſupérieur.

" Dans ce moment, l'angle inféri-
" eur de la diviſion des tégumens ſe
" déchira juſqu'à la vulve, & l'angle
" ſupérieur ſe rapprocha tellement de
" la plaie de l'opération céſarienne,
" qu'il s'en fallut peu que les trois ou-
" vertures n'en fiſſent qu'une. Les
" ſymphyſes ſacro-iliaques, déjà en-
" tr'ouvertes avec rupture des ligamens
" & du périoſte, au terme de vingt &
" une ligne d'écartement entre les os
" pubis, acheverent de ſe déchirer;
" & le firent avec aſſez de bruit, pour
" que l'oreille de chaque aſſiſtant en
" fût frappée. On y mit facilement
" le pouce en travers.

" Les os pubis, après la ſortie de la
" tête, reſterent écartés de l'étendue
" de trois pouces: leur écartement
" avoit ſans doute été plus grand au
" moment du paſſage de celle-ci. L'an-
" gle du pubis droit étoit diſtant du
" centre de la ſaillie du ſacrum, de
" deux pouces ſix lignes; & l'angle du
" pubis gauche, de deux pouces trois
" lignes ſeulement: de ſorte que la
" largeur naturelle du baſſin, conſi-
" dérée dans cette direction, s'étoit
" augmentée de dix lignes d'un côté,
" & de ſept de l'autre*."

* L'Art des Accouchemens, Tom. ii. p. 268, &c.

SECTION

SECTION V.

DR. LEAKE, who is one of the lateſt authors on this ſubject, and the laſt, whoſe account of it I have ſeen and can of courſe review, introduces his obſervations in the following manner. "Monſ. Si-
"gault deſcribes the ſection of the pubis,
"and propoſes it as a ſubſtitute for the
"Cæſarian operation, the propriety of
"which, as well as the objections
"brought againſt it, I am deſirous to
"examine with attention and candour;
"for little advantage can ariſe from
"opinions where men rather contend
"for ſuperiority than truth. The
"ſpirit of enquiry is only commenda-
"ble, when it is exerted for the im-
"provement of ſcience, and ſolely di-
"rected for the public good." And Dr. Leake then adds, "But although

" I am inclined to think favorably of " this operation for reaſons hereafter " aſſigned, I know that nothing but " time, and future experience, can " ſufficiently determine, whether it " ought to be adopted or rejected."

Theſe ſenſible reflexions precede Dr. Leake's anſwers to the objections which he ſtates, as having been brought againſt the operation; and as he is the only perſon, who in this country, has profeſſedly written on the favourable ſide, and theſe anſwers are evidently intended to operate in poſitive ſupport of the diviſion of the ſymphyſis, by compleatly removing all objections; I am therefore deſirous, of examining them with the ſame temper, which appears to have directed Dr. Leake in his reſearches, and particularly, as he recommends, with that " commendable ſpirit of enquiry, " which has the improvement of " ſcience, and the public good for its " immediate object." In theſe ſentiments therefore we join iſſue, but on the

the particular ſubject of our enquiries, I have the misfortune, entirely to differ in opinion with Dr. Leake, for while he is " inclined to think favorably of " this operation," I have inſuperable objections to its adoption, and while he wiſhes for " time and future experience," I am convinced, that when Dr. Leake publiſhed his book, we were in poſſeſſion of facts, ſufficiently numerous and unfavorable, to warrant the abſolute rejection of the operation.

Dr. Leake ſtates the five following objections to have been brought againſt the operation, which he carefully examines and endeavours to remove.

" *Firſt*, that the cartilages may hap- " pen to be oſſified."

" *Secondly*, that the neck of the blad- " der may be wounded."

" *Thirdly*, that the ſpace gained by " the ſection of the pubis, may not in a " narrow pelvis, be ſufficient to allow " the child's head to deſcend through " the cavity."

" *Fourthly*, that the union of the car-
" tilages may not be effected." And
" *Fifthly*, that the internal poſterior
" ligaments, uniting the ſacrum and
" illia, may be torn aſunder, by dividing
" the bones of the pelvis."

To theſe objections Dr. Leake anſwers, firſt, that cartilage being a ſubſtance eſſentially diſtinct from bone, is never found oſſified but in a preternatural ſtate, or in old age, after the time of child bearing is paſt, and when there never can be occaſion for the operation. This is in general, undoubtedly true, but moſt unfortunately, in one of the caſes, where the operation has been performed, this very accident did happen, for the ſymphyſis was actually oſſified in the woman at Wurtzburg, and the Preſident Seibold, was obliged to divide it with a ſaw; and in one of the four women I ſaw opened after death, there was an irregular oſſification, or exoſtoſis in the ſymphyſis, which prevented our cutting directly

directly through the cartilage. This is however of trifling conſequence.

The ſecond objection is, "that the neck "of the bladder may be wounded," to which Dr. Leake anſwers, that "as it "is ſlightly attached by cellular mem-"brane only, and not in cloſe union "with the cartilage, there never can "be the leaſt danger of wounding it, "except the operator is unſkilful and "ignorant of the ſtructure, and ſitua-"tion of the parts." A priori, the preſumption is, to be ſure, very ſtrong in favour of Dr. Leake's anſwer, that this is an accident which could never happen, but from the unſkilfulneſs or ignorance of the operator; and if we could always command a good anatomiſt and expert ſurgeon, who is in the habit of performing the operation, this accident might certainly be prevented; but there is a firſt time, that every perſon muſt do every operation, and what has happened to one, may reaſonably be expected to

happen to another; Monſ. Sigault candidly acknowledges that he did wound the meatus, and it is not likely this operation ſhould fall into better hands for the firſt time, than Meſſ. Sigault and le Roy, who had both been long engaged in conſidering it, and were much intereſted in the event; this objection is therefore entitled to ſome, but I would readily own, no very great weight.

The third objection is, "That the "ſpace gained by the ſection of the "pubis, may not in a narrow pelvis, "be ſufficient to allow the child's head "to deſcend through the cavity." This being an objection of the firſt magnitude, and if eſtabliſhed, would infallibly preclude all benefit from the operation, Dr. Leake has very properly taken great pains effectually to remove it*. He ſtates, that the opponents generally

* As Monſ. Alphonſe le Roy, and Monſ. Rouſſel de Vauzeſme had done before, and nearly in the ſame manner, the latter particularly thus expreſſes himſelf. "Si

nerally allow, that the ſpace gained by the aperture, between the divided bones, is nearly two inches and a half, and he confirms it by a caſe at the Weſtminſter lying-in Hoſpital, where a ſpace of two inches and an eighth, was actually gained after death, when the parts were cold and rigid; and he has no doubt he ſays that ſuch "additional ſpace would in "general be ſufficient to let the child's "head paſs, even in a pelvis ſo preter-"naturally narrow, that no other means "but the Cæſarian operation could be "deviſed for its birth." Dr. Leake then adverts to what has been obſerved he ſays by ſome, "that although "the long axis of the pelvis may from "thence be extended from ſide to ſide, "its ſhorteſt diameter from ſacrum to "pubis, where additional ſpace is moſt

"Si una e tuberoſitatibus parietalibus, aut alia quæ-"cunque pars capitis intra ſemotas pubes excipiatur, "*tum capitis volumen ea portione ſublata minuetur,*" and again "magnitudine diviſionis, quæ *capitis par-"tem haud exiguam debet excipere.*" Lib. cit. p. 73, 74.

"wanted

" wanted, will not be increaſed in the " ſame proportion, and therefore the " operation cannot avail." This, he obſerves, at firſt ſight, looks like a ſpecious objection, and he labours with conſiderable ingenuity and ability to remove the weight of it, in the following manner. He ſuppoſes that the ſpace of two inches and a half between the divided oſſa pubis, will be ſufficient to receive the occiput of the child, as it preſents at the ſymphyſis, " It will therefore fol- " low, (Dr. Leake obſerves), that as " much of the occiput, or hind head " as is protruded into an aperture at " the pubis of two inches and a half, " ſo much preciſely will be the ſpace " gained by this operation, and ſuper- " added to the ſhort axis of the pelvis " from ſacrum to pubis, which will " (as he afterwards takes notice) be equal " to the enlargement from ſide to ſide, " the circumſtance here contended for."

Fairneſs of argument obliges me to acknowledge, that the admiſſion of the occiput

occiput of the child between the divided oſſa pubis is undoubtedly a diminution of the volume of the head, and is therefore preciſely tantamount in effect to the enlargement of the ſhort diameter of the pelvis. This circumſtance I will therefore allow is fully proved. Yet I will venture to aſſert that, inſtead of deriving any advantage from the conceſſion, this fact ſo apparently favourable to the operation, and which Dr. Leake contends ſo ſtrenuouſly to eſtabliſh, affords the ſtrongeſt and moſt inſuperable objection to the operation itſelf. For if any portion of the child's head, protrudes into the opening between the divided bones, the ſoft and contiguous parts muſt neceſſarily be compreſſed ſo long, with ſo much violence, between the ſolid wedge of the child's head on the one ſide, and the ſharp edges of the divided oſſa-pubis on the other, that irreparable injury muſt be the almoſt infallible conſequence to the

the parts ſo compreſſed, but particularly to that moſt important part, the bladder, and probably to that portion of the cervix and os uteri which lies behind and in contact with it, but immediately before the head. It is therefore obvious, that whatever benefit is derived to the child by this means, muſt be infinitely more than repaid by danger to the mother, as will hereafter be abundantly confirmed by facts.

The partiſans of this operation, muſt, as it ſtrikes me, be reduced to this dilemma, if the oſſa pubis cannot be ſeparated wide enough to admit the occiput of the child, the ſpace gained to the ſhort diameter, will by no means be ſufficient to permit it to paſs alive through ſo ſmall a pelvis as abſolutely requires the Cæſarian ſection; and then, the very end and intention of the operation, muſt be infallibly defeated; or otherwiſe, if the ſeparation of the oſſa pubis be ſuch, as to receive the hind head of the child into the aperture, and by that means

means it be born alive, irretrievable injury will probably enſue to the mother; her future comfort, perhaps her life may become the ſacrifice.

The fourth objection "that the union "of the cartilages may not be effected," although firſt ſuggeſted by ſuch reſpectable authority as the Royal Academy of Surgeons at Paris, is compleatly refuted by experience.

The fifth, and laſt objection which Dr. Leake mentions, is, that "the inter- "nal poſterior ligaments uniting the "ſacrum and illia may be torn aſunder "by dividing the bones of the pelvis." To which he anſwers "reſpecting the "pretended laceration of the internal "poſterior ligaments of the pelvis, "uniting the ſacrum to the illia, I "muſt refer to the caſe at the Weſt- "minſter Hoſpital, already recited, "where the ſection of the pubis was "made in the preſence of ſixteen medi- "cal gentlemen, and where notwith- "ſtanding the ſpace gained was two

"inches

" inches and an eighth, no laceration " or the leaſt marks of violence appear- " ed, but on the contrary theſe liga- " ments were found perfectly firm and " in their natural ſtate." And Dr. Leake ſuppoſes, that in the living ſubject, where " the ſolids are more ſoft and " yielding," even a greater ſpace might be gained without laceration to thoſe ligaments.

There is ſo much variety in the accounts given, both of the ſpace gained by the ſection, and the conſequent ſtate of the internal poſterior ligaments, in living and dead ſubjects, that it is impoſſible to reconcile them with each other, or perhaps with truth, unleſs by ſuppoſing, that there is a material difference, in the original ſtructure of the poſterior joints of the pelvis in different women, either with reſpect to the intervening cartilages, or connecting ligaments, or perhaps both. But moſt eſpecially there is a material difference between the ſoft and relaxed ſtate of theſe parts,

parts, at or about the time of parturition, whether a few days before, or ſome time after it has taken place, compared with their natural ſtrength and firmneſs at any other period of life. No ſatisfactory concluſions therefore can be drawn from experiments made in the diſſecting room, or anatomical theatre, upon women, who have not died immediately preceding, during, or very ſoon after delivery.

Notwithſtanding the variety mentioned above, and that in the woman at the Weſtminſter Hoſpital, and in four other women I ſaw opened, (who died in the puerperal ſtate), the ligaments were not at all lacerated, even when the oſſa pubis were divided two inches and a half; and if we therefore admit that they may be capable of ſafely ſtretching, yet it is impoſſible for the oſſa-pubis to be divided to that extent during life, without the illia being conſiderably ſeparated from the ſacrum, and that ſeparation cannot be effected, without the in-

ter-

tervening cartilages being detached from the bones; and acute pain muſt always accompany, and permanent inconvenience frequently ſucceed ſuch violence; altho' in general perhaps, the *Vis medicatrix naturæ* may be ſufficiently vigorous, under favorable circumſtances of conſtitution to prevent irretrievable injury. In a good conſtitution, if the ligaments be not lacerated, a reunion will ſpeedily take place, by a proceſs common in animal bodies, and after a certain time, perhaps no material inconvenience may remain. This is conformable to obſervation; for in other joints, recent and apparently great injury incurred by violence to the cartilages and ligaments, where external air can have no admiſſion, has been eaſily and ſpeedily recovered. But in bad habits of body, or where the principle of life is weak, which is very generally the caſe with rickety and deformed women, the moſt untoward, troubleſome, and even incurable complaints have enſued from much ſlighter accidents about joints than

than the ſeparation of cartilage from bone. The miſchief, which might probably enſue to the poſterior joints of the pelvis, from the violent ſeparation of the oſſa-pubis, afforded, in the opinion of the opponents, the ſtrongeſt objection upon theory, againſt this operation; I confeſs however, that facts have not confirmed thoſe apprehenſions concerning it; for though it may be entitled to ſome weight, we are certainly not warranted by experience to ſay, that it in general conſtitutes an eſſential objection.

Dr. Leake afterwards compares the ſection of the pubis, with the Cæſarian operation, and for many, and good reaſons, gives the preference to the former; but unhappily, the two operations never can come into competition, for wherever the dimenſions of the pelvis are ſuch, as abſolutely to require the Cæſarian operation; no additional ſpace to be gained by the diviſion, will be ſufficient to enſure the delivery; otherwiſe there can

be no doubt of its being infinitely the ſafer and preferable operation.

I have in a former part of this work ſtated, what in my opinion, ought to be the dimenſions of the pelvis to juſtify that operation; by which it muſt be evident, how utterly inadequate in ſuch a pelvis, any ſpace which can be gained by the diviſion of the ſymphyſis, will be, to effect delivery, with a probability of ſafety to the mother, or a poſſibility of ſafety to the child.

Laſt of all, Dr. Leake proceeds to anſwer "thoſe perſons who vaguely "object to the operation," by telling them that it has already, and may again ſucceed with ſuch, as are diſpoſed to give it a fair and judicious trial, quoting from Monſ. Le Roy ſeveral examples of ſucceſs, and concluding with Profeſſor Seibold's caſe ſo often mentioned: of the circumſtances attending and the event of thoſe caſes, particularly the laſt, I ſhall give an accurate account in another ſection, that a due eſtimate may

may be made of the weight they are entitled to, in ſupport of the operation.

As Dr. Leake is the only perſon in this country who has avowedly written on the favorable ſide, and as he has taken great pains, compleatly to obviate all the objections, I have been induced to examine with attention, and I truſt with candour, his anſwers to the objections, and to conſider at ſome length, whether his arguments are concluſive in favour of the operation.

I will now beg leave to offer to the conſideration of my readers, ſome other objections, in addition to thoſe ſtated by Dr. Leake to have been made to the operation, and which are indeed ſo obviouſly material, that I own I have been much ſurprized, that they ſhould have eſcaped the notice of all the authors, who have written on the favorable ſide; neither Meſſ. Sigault, Le Roy, Camper, Dr. Leake, nor even Dr. Hunter, give the ſlighteſt hint concerning them. The foremoſt and moſt

eſſential, and which to my comprehenſion ſeemed an inſuperable objection, was, the injury the parts contained within the pelvis, might ſuffer,

Firſt, Accidentally by the knife, in the performance of the operation; but which they muſt afterwards inevitably ſuffer,

Secondly, By the violence in ſeparating the oſſa pubis after the ſection, and of neceſſity, tearing them away from the cellular connexion, which lines the pelvis, and which unites all the ſoft parts contained within the cavity, to thoſe bones.

Thirdly. By the free admiſſion of external air to all the contained parts, particularly to the bladder, and that perhaps for a conſiderable time, and to a conſiderable extent, than which, nothing is found to be more dangerous to all the cavities of the body, and their contents. External and cold air was never intended by nature, to penetrate into any of the cavities of the human body, they are therefore not prepared

pared to reſiſt its influence, and it becomes of courſe particularly hoſtile to the contained parts, by creating inflammation; which not being reſtrained by a natural proceſs as in external parts, extends over the whole cavity and contents, and is ever accompanied with great fever: often in the thorax, but generally in the abdomen, ending in gangrene and death; and even in leſs important cavities, the inflammatory ſymptoms, from that cauſe, always riſe to a very alarming height.

Fourthly. By the unavoidable compreſſion of theſe parts, againſt the ſharp edges of the divided bones, in the forceable delivery of the child; parts, which in their natural ſtate are extremely ſenſible, and irritable, and ſome of them even eſſential to life; and which, having been firſt torn from the bones, are now on the ſtretch from the diviſion of the oſſa pubis, and already injured by the admiſſion of the external air. But if we further admit with the favourers

of the operation, the poſſibility of ſuch a ſeparation of the oſſa pubis, as ſhall be capable of receiving the occiput of the child into the aperture, the ſoft parts (as * before obſerved), will be ſo compreſſed between the ſolid wedge of the child's head, and the ſharp edges of the bones, that they muſt be utterly unable to reſiſt ſo many complicated cauſes of miſchief. Inflammation and fever to ſuch a degree, as in moſt caſes to end in gangrene, and ſometimes in death, were therefore reaſonably to be expected from this operation, and experience has too fatally confirmed our apprehenſions.

The next objection is the poſſibility of the illia being anchyloſed with the ſacrum. I am ready to allow this is not a very probable objection, but if it ſhould happen, it is irremediable.

The next and laſt objection that I ſhall mention, is, the ſmall probability of ſaving the child, after all the pain and

* See page 190.

dan-

danger incurred by the unhappy mother. It is well known to the experienced reader, how precarious the preſervation of the child is, even in a tolerably ſized pelvis, in all preternatural preſentations. The continued compreſſion of the funis by the head in its paſſage through the pelvis, uſually deſtroys the life of the child, where there is only a ſmall deformity; but infallibly, where the diſtortion is conſiderable, and where great and repeated force is required, to extract the child. This objection too, will be compleatly eſtabliſhed by the event of the caſes, to be immediately related, in the next ſection.

SECTION VI.

WHEN the diviſion of the ſymphyſis pubis, was firſt announced in this country, the objections deſcribed in the laſt ſection, immediately, and forceably preſented themſelves to my conſideration, as neceſſary to be removed, before we could be warranted in the adoption of the operation into general practice. From the ſplendid manner in which it was firſt introduced on the Continent, I had little doubt, but that we ſhould in a ſhort time, be in poſſeſſion of facts ſufficiently numerous to determine its real merit. I knew experience would very ſoon remove, or fully confirm thoſe objections; and that to take up a haſty and inſuperable prejudice,

judice, againſt any diſcovery, upon arguments of theory, however ſtrong or reaſonable, was diſreſpectful to the ingenuity of the inventor, inconſiſtent with candour, and diſcouraging every future attempt to improve the art. I waited therefore with becoming patience, to ſee whether thoſe objections were removed, or confirmed by experience; in the mean time, ſparing no pains to ſecure, as was my indiſpenſable duty, every channel, through which it was in my power to procure ſuch information.

It is more than five years ſince the firſt operation was performed at Paris, during which period, it has been repeated about five-and-twenty times, in different parts of Europe, but with very different ſucceſs. As the merit of this new invention muſt be determined by the event of thoſe caſes, and the circumſtances attending them, I will now beg leave to lay before my readers the particulars of each caſe, as far as they have

have come to my knowledge, or as they appear to me intereſting in the recital, or important in the conſequence.

I have collected the particulars of ſeventeen of the caſes with tolerable accuracy; of the remaining eight, I have been able to procure no ſatisfactory information, not even of the event. How far the accounts are correctly true, no perſon in my ſituation can be anſwerable; I have not the ſlighteſt inclination to give a complexion to the caſes, different from their natural tendency, but if I had, I muſt be infallibly precluded from the poſſibility of doing it, by giving the author's deſcription in his own words. It is with infinite pain, and not without ſome indignation, that I have detected the moſt palpable perverſion of the truth in the deſcription of the circumſtances of ſome, and even in the event of other caſes; by which means, a favorable repreſentation has been attempted to be impoſed on the credulity of the pub-

public, where the genuine ſymtoms, and real event, would have afforded the moſt concluſive evidence againſt the operation; than which, in an affair of this nature, ſurely, nothing can be more inexcuſable. As far as mere opinion goes, every perſon may be allowed, innocently to indulge himſelf with viſionary expectation of ſucceſs; different perſons ſee things through ſuch different mediums, even in ſcience, that very often, the wiſeſt and beſt informed, differ toto cœlo in their opinion, and draw diametrically oppoſite concluſions from the ſame premiſes; inſomuch that the correctneſs of the preſent age, always requires a faithful repreſentation of experiments in philoſophy, and of facts in phyſic, before any new doctrine, can be juſtified, or eſtabliſhed. In an affair of ſo much conſequence as this operation may be, to the unhappy individuals who are the ſubjects of ſuch laborious parturition, to palliate, conceal, or in any manner, miſrepreſent the circumſtances of a caſe, is highly culpable; but eſpecially

cially ſo far to depart from the ſacred obligation of truth, as to deſcribe that event to be ſucceſsful, which has in reality been fatal, is an offence ſo injurious to the intereſts of humanity, that it cannot in my opinion be too openly expoſed, or too ſeverely reprehended.

The firſt caſe of Mrs. Souchot is already diſcribed; Mr. Sigault has performed the operation four times ſince, in which he has loſt *one woman and all the children*; ſo that Mrs. Souchot's was the only caſe, where the intention of the operation was compleatly anſwered, or where both mother and child were preſerved; and as there appear ſome particular circumſtances about her child, not deſcribed by Mr. Sigault himſelf, or known to the public, I will here beg leave to quote Monſ. Baudeloque's animadverſions upon Monſ. Sigault's ſucceſs in that caſe.

" De cinq femmes qu'il a opérées, " *une a été victime de cette nouvelle* " *méthode*; *quatre enfans ſont morts* " *en-*

" *entre ſes mains*, & il n'a pu ſauver " juſqu'ici que celui de la femme " Souchot, peut-être n'eſt-ce que parce " qu'il étoit *très-petit*, & que le baſſin " de cette femme n'eſt pas contreſait " au dernier point*." And again, page 259,

" S'il eſt prouvé que l'enfant de " la femme Souchot n'a dû le précieux " avantage de naître vivant qu'à ſon " peu de volume & à la ſoupleſſe des " os du crâne, comme quelques-uns " l'ont publié, la ſection du pubis, " dans le nombre d'obſervations citées, " n'a donc point encore eu de ſuccès " inconteſtables; puiſque ſans ſecours, " l'enfant dont il s'agit, auroit pu " jouir des mêmes avantages.

" Nous avons vu cet enfant le trei- " zieme jour de ſa naiſſance, il étoit " *fort petit*, & *ſa figure préſentoit un* " *caractere d'immaturité, tel qu'on l'ob-* " *ſerve ordinairement aux enfans qui*

* L'Art des Accouchemens, Tom. ii. P. 233.

" *naiſ-*

" *naiſſent au terme de huit mois*, & que " nous l'avons remarqué ſur pluſieurs " enfans de femmes qui avoient été " rachitiques, & qui en avoient encore " l'habitude extérieure."

In ſome ſort to confirm his opinion (juſt quoted) concerning the ſize, &c. of Mrs. Souchot's child; Monſ. Baudéloque obſerves (as mentioned above) that Mr. Sigault has not been able to preſerve any other child, altho' he has repeated the operation four times, and of which further notice will be taken in the ſequel.

The next caſe where the diviſion was performed, was at Mons in Hainault, by Monſ. Cambon*, who in March 1778 performed this operation on a taylor's wife, which ſucceeded perfectly well as far as related to the mother, but the child was born dead; indeed from Mr. Cambon's own account, it was by no means indicated by neceſſity, and as

* See Lettre a Monſ. Branvilla, Ecuyer, Premier Chirurgien de L. L. M. I. R. A. &c. Par Monſ. Cambon, Ecuyer, &c. Mons, 1780.

he

he deſcribes the funis preſenting before the head, there was a very ſlender chance of the child being preſerved in a ſmall or deformed pelvis. It was therefore in my opinion inexcuſable, thus wantonly to expoſe the poor creature to ſo tremendous an operation, almoſt without the poſſibility of an equivalent, notwithſtanding Monſ. Cambon deſcribes her recovery in the following favorable manner, " Cette femme n'eut pas le " moindre accident de ſon opération, ni " des ſuites de ſa couche :" " La malade " urina à volonté quatre heures après " ſon opération, ce qu'elle continua " de faire naturellement, ainſi que ſes " autres fonctions, juſqu'à ſon entiere " guériſon, qui arriva le premier Mai, " & elle marcha dès lors, ainſi qu'elle " fait aujourd'hui, comme ſi on ne lui " eût jamais fait aucune opération*."

His ſecond caſe ſucceeded compleatly, and from the ſtature of the patient be-

* P. 11 & 12.

ing

ing only 40 inches, it is preſumable that her pelvis was very much deformed, but his deſcription of it is ſo imperfect, and the whole caſe detailed in ſo looſe and ſuperficial a manner, that the neceſſity for the operation, is by no means eſtabliſhed; however, both mother and child were preſerved; and we are informed, that after the diviſion, the child was extracted with the forceps; that the mother had ſome fever with tumor of the abdomen, &c. on the eighth day, which were cured by camphor, and which he recommends ſtrongly in ſuppreſſions of the lochia, &c.

The third caſe deſcribed by Monſ. Cambon, is a repetition of the operation upon the taylor's wife, who was the ſubject of the firſt caſe; and this being the only one extant, where the operation has been done twice on the ſame patient, and as it ſucceeded compleatly in preſerving both mother and child, I will beg leave to preſent to my readers Monſ. Cambon's own

own account, of the peculiar circumſtances, and favorable event of this caſe.

In performing the ſection, he obſerves†, " le cartillage qui unit les " deux os, je le trouvai plus ferme & " beaucoup plus ſolide qu'à la premiere " opération, & je l'eſtimai de la conſiſ- " tence des tendons, craignant avant " même de faire l'opération, tant cette " femme marchoit avec aiſance & faci- " lité, qué les cartilages qui uniſſent " les deux os ne fuſſent oſſifiés." " L'é- " cartement ſe fit avec moins de viteſſe " qu'à la premiere opération." " Elle " n'éprouva d'autre accident *qu'une* " *fievre de vingt-quatre heures*, le dou- " zieme jour de ſon opération ; elle fut " occaſionée par un rhume épidémique, " dont preſque toute la ville fut atta- " quée : elle n'eut donc à cette ſeconde " opération, comme à la prémiere, *au-* " *cune ſuite provenant de la ſymphyſe ni* " *de ſa couche* ; *la plaie fut bien cica-*

† P. 22, 23.

" *triſée le* 12 *du mois ſuivant & elle*
" *marche comme auparavant.*
" L'enfant eſt auſſi en parfaite ſanté,
" & la mere continue à le nourrir."

The next operation was performed by Monſ. Deſpres de Menmeurs, of St. Pol de Leon in Brittany*, upon Ann Berou, a ſoldier's wife, and it ſucceeded compleatly, as the account ſtates, for both mother and child were preſerved. It appears however, that if the operation was performed at all, it was performed unneceſſarily, for the ſame woman was delivered naturally of a living child the next year†.

Upon what authority he does not ſtate, but Dr. Weidmann ſays, the diviſion of the ſymphyſis was never performed in this caſe. " Verum relatum

* Journal de Medicine, p. 428.

† " rien ne prouve plus evidemment l'abus qu'on
" a déjà fait, de cette nouvelle operation. (Berou)
" *eſt accouché naturellement* 10 Juillet 1779, en pre
" ſence de pluſieurs chirurgiens & medicins de la
" Marine de Breſt." Baudeloque, P. 257.

" habe-

" habemus, D. Deſpres *ſynchondroſin*
" *pubis nullatinus diſſecuiſſe*‖."

The next caſe with which I ſhall beg leave to preſent the reader, is of much importance in determining the merit of this operation; for ſo different a deſcription, has been given to the public by the favourers of the operation, of the circumſtances attending it, from what was the real ſtate of the caſe, that if candour requires us to believe, that the repreſentation was not made with a deſign to miſlead, at leaſt, it muſt have happened from the moſt inexcuſable negligence. It is one of the ten ſucceſsful caſes, related by M. Rouſſel de Vauzeſme, which he deſcribes " as
" *commanding the aſſent, or ſilence of*
" *ſuch, as are envious of this great diſ-*
" *covery**."

It may be neceſſary perhaps to apologize for the length of the quotation, but it is authentic, ſatisfactory, and im-

‖ P. 30. * P. 36.

portant: and exactly the ſame account was tranſmitted by the Preſident Seibold (the operator) to Profeſſor Richter of Gottingen and inſerted in his Bibliotheca Chirurg. in the German language, and from thence transferred into another book, with the ſame title, publiſhed laſt year at Vienna†.

The preſident tranſmitted the ſame account to the Royal Academy of Paris, from which, ſome intereſting particulars have been extracted by Monſ. Baudeloque; and he alſo ſent it to Profeſſor Lobſtein at Straſburg, which laſt was inſerted in Dr. Bentely's Theſis; but by much the moſt minute deſcription of the caſe was publiſhed by Dr. Weidmann in his Comparatio, &c. He had been preſent, and aſſiſted at the operation, and was afterwards intruſted with the particular charge of the patient. All theſe accounts of courſe agree exactly in the deſcription of the ſymptoms and

† See Chirurg. Biblioth. Authore Steph. Hieron. de Vigiliis, Von Creutzenfeld, Phil. & Med. D. Vol. 2. P. 1289.

event.

event. They all ſtate the *fever, inflammation, gangrene, fiſtula of the bladder, exfoliation of the oſſa pubis*, &c. &c.

But as the account of this caſe publiſhed by Mr. Rouſſel, differs ſo eſſentially from all the other accounts, and ſo certainly from the truth, (in omitting every bad ſymptom); and as a ſpecious complexion is given to the operation, from the colouring beſtowed on it by the French relater, and the firſt partiſans, (inſomuch that Dr. Leake calls it a *ſucceſsful* caſe, from the imperfect account of it conveyed to him by Dr. Hauſeman of Brunſwick,) I will entreat the reader's attention to the following extracts of the moſt material parts of the caſe, as moſt accurately related by Dr. Weidmann*.

* P. 34 to 51. I ought in juſtice to Dr. Weidmann to remind the reader, that this account is mutilated, by omitting every part (to ſhorten it) that was not thought eſſential; hence the apparent want of connexion will be underſtood, and pardoned.

" Margaretha Markard ex Pfersdorf,
" prope Kiſſingen, 35. annorum, ſta-
" turæ mediocris, ſani habitus, ante 11.
" annos nupta, ſepties peperit. Fœtus
" ſex naturaliter quidem, aſt difficili,
" pluriumque dierum labore eniſa eſt;
" ſeptimum in fruſta diuulſum chirur-
" gi pagani induſtria extraxit."—" Ma-
" num dein facile in vaginam inducit,
" ſentit promontorium oſſis ſacri ante-
" rius adeo in peluis cauum prominere,
" vt *coniugatam lineam tribus vnciis*
" *vix maiorem* eſſe exiſtimet."—" Præ-
" ſentibus igitur Profeſſoribus Senft et
" Medico Aulico Ehlen, tribus condiſ-
" cipulis meis et me, parturiente noſtra
" in marginem lecti ſua poſita, ita vt
" figi operanda poſſit, oſſi vero coxigis
" liber motus pateat."—" Cum vna
" quarta modo cartilaginis pars diſciſſa
" eſt, aſt circa cartilaginis medietatem
" impingit operator in inexſuperabilem
" cultro reſiſtentiam, adhibet violen-
" tiam."—" Fatigatus dein vltra me-
" diam horam iſtis Encheireſibus fruſ-

" tra,

" tra, perſuaſum habet, *reliquam me-*
" *diamque ſynchondroſeos partem oſſi-*
" *ficatam eſſe.*" " Ego iuſſus a Cl.
" Præſide meo ſerrulam parum incur-
" uatum, globoſo apice, ne lædat, mu-
" nitam accerſo; hac, operator oſſa pu-
" bis caute et ſecure, citra partium
" mollium læſionem diſcindit."—Fini-
" tus ita *terribilis adeo partus*, et tanto
" impedimentorum confluxu difficilli-
" mus, in cuius decurſu omnem artem
" viresque ſuas victas fore timuit Cla-
" riſſimus praeſes, et toties in nouam
" hanc operationem *ſe abreptum fuiſſe*,
" *partumque caeſareum non antepoſuiſſe*
" *doluit*, perpendens ſecum, foetum,
" licet viuus fuiſſet, per haſce angu-
" ſtias *ſeruata vita educi ſane non po-*
" *tuiſſe.*

" Primo ab operatione die pulſus fre-
" quens eſt, et durus, e vena brachii
" ad octo vncias ſanguinis emittere
" iubet Cl. praeſes. Eductus ſan-
" guis cruſta phlogiſtica tectus eſt; lo-
" chia rite fluunt, in ſiniſtro peluis

" latere vterus durus ſentitur, vrina
" adhuc contra voluntatem ſtillat."

" Sub veſperum pulſus celer 130*es*
" *intra minutum micans*, rubet facies,
" intumeſcit abdomen, vterus durus
" ſupra peluim iacet, et parum dolet
" attactus, repetitur venae ſectio.

" De nocte ſymptomata inflamma-
" tionis perſtant, cheirurgus excubias
" agens denuo venam aperit."

" 5ta. Vrina aliquoties ſponte pro-
" fluxit, aegra in mouendo ſe ſitumque
" mutando ſummàm difficultatem ſentit,
" *et medium, a vertebris lumbaribus,*
" *corpus paralyticum quaſi eſſe.* In
" vulnere pus, circa veſperum febris
" exacerbatio, maiorque ventris intu-
" meſcentia, aegra et valde de *dolori-*
" *bus circa nates et oſſa ilei*, eorumque
" *cum ſacro iuncturam queritur.*"

" *Vrina praeter arbitrium adhuc ef-*
" *fluit*; num id collo veſicae nimium
" diſtento, vel capite tranſeuntis foetus
" nimis compreſſo adſcribendum? cul-
" tro laeſio eiuſdem facta non eſt) circa

" veſ-

" veſperum febris iterum mitior, dolor
" tamen vehemens circa pubem eſt,
" auctus attactu, *omnis vrina praeter*
" *arbitrium effluit*;" " Die 9na. ſitum
" aegra difficillime quidem mutans, cir-
" ca ſynchondroſes ilioſacras nihil ta-
" men vel doloris vel incommodi ſentit.
" Inter deligandum ex *imo vulnere vol-*
" *ſella ſaepius eximuntur gangraenoſae et*
" *naturae viribus ſolutae membranarum*
" *particulae.*

" 10ma. die ab operatione febris per-
" ſtat, mitis tamen, omnis fere vrina
" cum pure per vulnus defluit, etiam
" dum aegra per viam ordinariam ean-
" dem emoliri nititur: concluſit hinc
" carus Praeceptor meus, *vrethram*
" *prope collum inflammatam fuiſſe, hanc-*
" *que inflammationem in eſcharas gangre-*
" *noſas abiiſſe,* viribus dein naturae ex-
" pulſas; ſolutis hiſce eſcharis patuiſſe
" in vulnus iter vrinae, quod non
" patuerat, donec ſolutae eſcharae non
" eſſent.

" 11ma.

" 11ma. Febris eadem ac heri, ea-
" demque vrinae per vulnus profuſio,
" iterum ex *imo vulneris fundo gan-*
" *grenoſae membranarum lamellae* vol-
" ſella auferuntur, immiſſa per vre-
" thram et catheterem iniectio impe-
" tuoſius per vulnus regurgitat."—" ſuſ-
" picari igitur fas eſt, per *diſtenſiones*
" *diuulſioneſque violentas pone veſicae*
" *collum natam inflammationem in gan-*
" *grenam ceſſiſſe*, et vrinae patulum
" viam per vulnus dediſſe.—Oſſa pu-
" bis, vbi diſſciſſa ſunt, ſcabra et ca-
" rioſa, vuluae labia ſero infiltrata
" ſunt," &c. &c.

It appears that this poor woman was ſo far recovered from the operation, as to return home the 2d. of April; but there remained a fiſtulous opening into the bladder, with occaſional exfoliations from the divided oſſa pubis for near eighteen months; for Dr. Weidmann adds,

" 18. Iulii 1779. viſurus, an in
" vado omnino ſint operatae noſtrae

" res

" res, egomet in pagum Pferſdorf iter
" facio: inuenio illam domeſticis ſuis
" negotiis occupatam, ſuae ſpontis, et
" optime valentem; dicit, ſe ſaepius
" adhuc inflammatione circa opera-
" tionis locum correptam fuiſſe, imo
" et tum vrinam iterum per *vulneris*
" *fiſtuloſam aperturam ſtillatim efflux-*
" *iſſe*; ſingulis vero vicibus remittente
" inflammatione exiuiſſe *oſſicula exfo-*
" *liata*; ante tres menſes vehementiore
" inflammatione ſe correptam fuiſſe,
" ſub huius remiſſione fragmentum
" oſſeum ad vulneris orificium ſe
" offerens difficulter eductum fuiſſe, et
" poſt ceſſaſſe omnia mala ſymptomata.
" Vulnus probe nunc conſolidatum eſt,
" rotunda cicatrix eſt et firma. Digito
" in vaginam immiſſo, videor mihi
" ſentire callum eſſe molliorem, oſſi-
" bus pubis diſciſſis intermedium;
" operata etiam ſe tactu exploratam
" habere, oſſa pubis immediate inter ſe
" *nunquam coniuncta fuiſſe aſſerit*; men-

" ſes

" ſes rite fluunt, iis vero inſtanti-
" bus circa pubem dolor eſt."

I will now beg leave to lay before the reader, juſt ſo much of the account of this caſe publiſhed by Monſ. Rouſſel de Vauzeſme, as will ſhew the intention of the relater in the cleareſt point of view.

After a general deſcription of the operation, he concludes, " *Non enim*
" *veſica, non urethra ullam jacturam*
" *paſſæ ſunt. Exiguo admodùm tempore*
" *ſedata eſt inflammatio, nec gravis ullo-*
" *rum ingruit ſymptomatum ſeries.*" P. 96

I am perſuaded, every attentive reader will anticipate me in the reflexions this laſt aſſertion muſt ſuggeſt; in the name of humanity and common ſenſe! if *fever, inflammation, temporary paralyſis, and ſubſequent mortification of the bladder, ending in a fiſtula, by which the urine continued to eſcape for eighteen months, and during which period occaſional exfoliations from the oſſa pubis were frequently happening, are* not to be call-

ed

ed "*gravis ſymtomatum ſeries*," what train of ſymptoms not preceding death itſelf, can ever be conſidered *as grievous?*

The next caſe is ſtill more tremendous, becauſe it ended fatally both to mother and child; and here the miſrepreſentation is more palpable and inexcuſable, but as it is poſſible that Mr. Rouſſel de Vauzeſme may himſelf have been impoſed upon, I will not impute to him ſo groſs a violation of truth, as to ſuppoſe that he knew the genuine event of the caſe, for it was not announced in the firſt account; but I muſt beg the reader's attention to the different deſcriptions. It is another of the ten caſes which is included in his "Huc "uſque res *proſpere* cedentes."

"Prope urbem Nemetum (Spire "dans le bas Palatinat) mulier vocata "Anna Maria Schmidrinn, jam per "tres continuos dies miſerè puerperii "doloribus angebatur. Peritiſſimus "Chirurgus obſtetricans D. Nagel cal-"lidè pelvis diametros explorat, & in-

"ter-

" ternum offis ſacri parietem offeo tu-
" more ſic aſperum eſſe animadvertit,
" ut omnis ſpes partûs naturalis præci-
" deretur. Tùm aſſentientibus gravidâ
" proximiſque (die quintâ Aprilis 1778)
" & præſentibus DD. Biernſtiel, D. M.
" & Albert peritiſſimo Chirurgo, Sym-
" phyſis offium pubis ſcalpro dividitur.
" Extemplò fermè, *vivus infans in lu-*
" *cem facillimè propellitur & paucis poſt*
" *elapſis diebus, tàm benè ſeſe habebat*
" *puerpera,* quàm *benè valere poteſt quæ*
" *partûs difficilis pertulit incommodum**,"
This is the account given by Mr. Rouſſel, but here follows the genuine hiſtory†,

" 5. April. anni eiuſdem D. Nagel
" Cheirurgus Bruchſalienſis cum Doc-
" tore Berenſtiel operationem hanc in-
" ſtituit in foemina, quae tres maturos
" foetus, duos poſteriores vero mortuos
" iam modo ediderat. Foetus inique
" facie dextrorſum ſitus, neque vltro
" vrgetur doloribus, neque verſione,

* P. 97. † Weidmann's comparatio, P. 30.

" neque

" neque forcipe prehendi poteſt. Poſt
" *diſſectionem cartilaginis ſit verſio, ad-*
" *huc omnino difficilis. Foetus per ali-*
" *quot adhuc minuta viuere viſus fuit.*
" *Aegra die poſt operationem octaua cum*
" *ſignis gangraenae, adhibita licet omni*
" *opera, fatis cedit. Exenteratio exhi-*
" *uit partes genitales externas ſphacelo-*
" *ſas, vrethram integram, telam cellu-*
" *loſam ſub oſſibus pubis corruptam et*
" *ſanie perfuſam, os vteri gangraenoſum,*
" *vt et interna et poſterior facies vteri.*
" *Linea peluis coniugata erat vnciarum*
" *trium.*"

The next caſe which is to be related, happened at Arras, it was under the direction of Monſ. Retz, a phyſician of eminence, but Monſ. L'Eſcardé performed the operation, the following account of it is extracted from Monſ. Rouſſel*.

" Hic Medicus parturienti fortè oc-
" currit quæ jamdiù propter pelvis an-
" guſtiam diris afflictabatur tormentis.

* P. 104.

" Ità

" Ità vehementer tùm inflammatione
" correpta erant genitalia, ut in vagi-
" nam introgredi nequaquàm digitus
" poſſet; jam de omnibus fermè concla-
" matum erat, cùm ſibi ad memoriam
" revocans illud Celſi monitum, fatius
" eſſe in re deſperatâ anceps experiri
" auxilium quam nullum, à peritiſſimo
" Chirurgo Leſcardè pubem dividi ju-
" bet. Cujus ſectionis ope egreſſus *ho-*
" *muncio, ad aliquot horas ſpiravit, &*
" *ad diem quintum uſque ſupervixit*
" *mater.* Quæ ſi protinùs non acta
" ſint, nec *miſeræ præſto fuiſſet extre-*
" *ma-unctio,* nec *baptizatus infans.*
" Nihilo-minùs *Medicum tot clara per-*
" *agentem nefariè* inſimulant invidi,"

A long and very particular relation, of the diſpute this caſe occaſioned, between Meſſ. Retz and L'Eſcardé, on one ſide, and all the phyſicians and ſurgeons of Arras, on the other, as well as an accurate account of the appearances after death, authenticated by all parties, may

may be found in Monſ. Sue. Unneceſſary * as this operation certainly was, and fatal as the event proved both to mother and child, Monſ. Rouſſel (as the attentive reader will have obſerved above) like a true Frenchman and a good Chriſtian, derives from this caſe ſome conſolation to himſelf, and attributes ſome credit to Monſ. Retz, inaſmuch as the child lived long enough to be baptized, and the mother long enough to receive extreme unction; it would be highly unbecoming, and indecent, to arraign the religious prejudices of any country, by endeavouring to leſſen the merit of baptiſm to the child, or extreme unction to the mother, but I think the common ſenſe of mankind, of all religions, and in all countries, muſt be ſhocked, at the concluding words of the quotation, where Monſ. Retz, for affording baptiſm to the child

* Monſ. Sue expreſsly ſays, "le *detroit du petit baſſin avoit deux pouces, dix lignes.*" P. 342.

and for prolonging the mother's life long enough to receive extreme unction, is deſcribed as "*medicum tot clara peragentem.*"

Another caſe fatal both to mother and child, ſtill remains to be related, which was attended with circumſtances more complicated, and more perplexing, than any of the preceding ones. It happened at Duſſeldorf, in May, 1778, of which two accounts have been publiſhed, one in French by Profeſſor Guerard, the operator, and another in the German language, by Mr. Brinkmanns who was preſent; as I have not yet been able to procure, either the one or the other, the reader muſt be ſatisfied, with the following tranſlation into Latin, extracted from Dr. Bentely's Theſis*, together with an account of the diſſection of the body. "Inſtituebatur a Clar. "Guerardo maxima cum cautela, abſque "ulla læſione alicujus partis non læden-"dæ. Sub operatione ramus quidem ar-

* P. 45.

"teriæ

" teriæ pudendæ externæ diſſectus ſan-
" guinem magna copia fundebat, qui au-
" tem applicatio digito ſtatim ceſſabat.
" Inciſo autem annulo ligamentoſo ab
" antica ſui parte pubis oſſa jamjam ſe-
" parata animadvertebantur, ſecedebant-
" que a ſe invicem aliquo cum crepitu,
" itaut intervallum inter pubis oſſa ſeſ-
" qui pollicem æquaverit. Diductis ita-
" que ad ſeſquipollicem pubis oſſibus,
" protractoque in vaginam uno pede alter
" erat quærendus, id, quod autem im-
" petrare haud potuerant, manus enim
" introductio in uteri cavum adhucdum
" impoſſibilis erat, quamobrem ſolius
" pedis extracti ope fœtus verſionem
" tentarunt; quod etiam incaſſum erat,
" quippe fœtus caput ſemper immo-
" tum manebat: ut autem introitum
" in uteri cavum ſibi compararent, ſol-
" vere tentarunt femur ab ipſo trunco,
" ut nempe apertura ſuperior ab illo li-
" beraretur, atque manui introducendæ
" ſpatium concederetur, cumque femur
" a trunco abſcedere deberet, crus a

" femore ſeſe ſeparabat, ita tamen ut
" femur in uteri cavum refundi potue-
" rit : quo facto tunc omnia in vado
" eſſe putarunt, dum manum per aper-
" turam ſuperiorem nunc facili negotio
" ad alterum pedem uſque demittere
" potuerunt, ſperarunt fore ut operati-
" oni cito finem imponere, partumque
" abſolvere poſſent, at etiam hæc ſpes
" fefellit, uteri enim contractiones tan-
" ta urgebant vi, ut manum obſtupefac-
" tam quaſi retrahere coacti fuerint.
" Quod autem manum in uteri cavum
" nunc demittere potuerint, non cen-
" ſendum eſt, ac ſi pubis oſſa a ſacro
" antrorſum remota, conjugataque elon-
" gata fuiſſet, ſed id inde factum, quod
" eminentia a dorſo pollicis formata in-
" tra pubis oſſa a ſe invicem remota
" collocabatur, ſpe ſua itaque decepti
" tentarunt adhuc forcipis applicatio-
" nem, at itidem fruſtraneam, fœtus
" enim capite nimis alte & oblique in
" pelvi adhuc hærente.

" In

" In tantis rerum anguſtiis ad ulti-
" mum tandem confugerunt remedium,
" *perforarunt nimirum cranium magno*
" *quidem cum negotio, effluente cerebro*
" *cranium paululum magis deſcendebat,*
" *unci applicatio locum non habebat nec*
" *non etiam forceps, & licet quidem oſſa*
" *quædam a cranio abripiebantur, caput*
" *tamen ſemper manebat immotum.*

" Deficientibus autem verſus veſpe-
" ram matris viribus lecto componeba-
" tur ægra, quo etiam paululum refici-
" ebatur ; noctu autem dum aliquid
" in vaginam deſcendere ſentiebat, chi-
" rurgus tum temporis vigilias agens,
" acceſſit ad illam, caputque deſcendere
" animadvertens, fœtum mediocris mag-
" nitudinis extraxit, inſequentibus ſpon-
" te ſua ſecundinis. Et ita tandem fi-
" nita fuit hæcce operatio.

" Fœmina dein operatione finita vi-
" tam adhuc trahebat per decem dies,
" quibus effluxis animam expiravit.
" Admodum erat debilis & defatigata
" per decem hoſce dies ; venter mox

" magis mox minus erat tumidus tur-
" giduſque. Pulſus erat debilis & fre-
" quens. De lochiis parum aut fere
" nihil promanabat. Ægra vexabatur
" ſingultu, tuſſis, quæ ab initio ſicca
" erat, humida tandem evadebat.
" Quarto die ſuppurationis materiem
" fundere incipiebat plaga. Urina,
" quæ involuntarie deſtillabat, ſexto
" die retinebatur.

" Deligationis apparatus admodum
" laxe erat applicandus, nec etiam pu-
" bis oſſa penitus ad ſe invicem adduci
" potuerunt, quod ſi enim faſcia paulu-
" lum firmius adſtringebatur, graves
" admodum dolores in plaga ſentiebat
" ægra. Reſpirationis difficultas ſenſim
" ingraveſcebat, expectoratio evadebat
" admodum difficilis, ita ut tandem
" tantis vexata doloribus, tantiſque op-
" preſſa ærumnis e vita deceſſerit.

" Aperto cadavere ſecundo poſt mor-
" tem die intervallum inter pubis oſſa
" reperiundum, atque ſeſquipollicem æ-
" quans, *aliqua ex parte quædam veſicæ*

" *portio*

" *portio occupabat, quæ lividi coloris*
" erat prouti etiam plaga; inteſtina
" aëre admodum erant diſtenta atque
" turgida, atque ea, *quæ in viciniis uteri*
" *hærebant maculis fuſcis erant obfeſſa.*

" Uterus contractus parvum offerebat
" ulcus ſiniſtro in latere, paululum ſub
" vaginæ connexione cum uteri collo,
" materieſque purulenta effuſa hærebat
" in pelvis cavo.

" Aperto dein thorace pulmones ani-
" madvertebantur turgidi, ſanguineque
" admonum repleti, colorem hepatis
" æmulantes.

" Pelvis diametri nunc accuratius
" luſtrari valebant, & quidem *conjuga-*
" *ta naturalis erat* = $2\frac{1}{2}$ *pollicum Pa-*
" *riſ. eadem diameter ducta a promon-*
" *torio oſſis ſacri ad pubis oſſa a ſe in-*
" *vicem remota duabus ſolummodo lineis*
" *erat major*, tranſverſa diameter 6 poll.
" Pariſ. & 2 lin. æquabat. *Synchondro-*
" *ſes ſacro-iliacæ erant ſeparatæ admo-*
" *dumque mobiles; illa lateris ſiniſtri ma-*
" *jorem admiſit ſeparationem. Ligamenta*

" *diſrupta non erant.* Inferior apertura " nulla laborans vitio naturales ſerva- " bat dimenſiones."

I muſt now beg leave to revert to two of the operations performed by Mr. Sigault, as containing ſome circumſtances too important to be omitted.

One patient named Veſpres, died in conſequence of the diviſion of the ſymphyſis; and upon examination after death, it appeared that great violence had been done to the ſacro-illiac joints, and that there were likewiſe evident marks of gangrane in the uterus, &c.

Mrs. Blandin, the other patient, who was delivered of a dead child by Mr. Sigault in 1779 by means of this operation, was, the following year delivered naturally of a living child by Mrs. Belami, a midwife at Paris, who had been ſent for to attend her in conſequence of Mr. Sigault's refuſal, unleſs he was again permitted *to repeat the ſame operation* *. After reading an

* See Baudeloque, page 243.

ac-

account of the preceding dreadful caſes, one cannot help feeling and lamenting the ſituation of this poor woman, who beſides the preſent pain, and certain inconveniences attending the ſection, was cruelly expoſed to the riſque, of ſuffering in future, the moſt painful ſymptoms, and extreme danger, without the ſlighteſt reaſon, or the ſmalleſt neceſſity; and what is worſt of all, not only, without deriving any equivalent, by the preſervation of her child, but even involving its abſolute deſtruction in her own danger, and all, to gratify a wanton predilection for this new-fangled operation!

The event of this woman's ſecond labour muſt prove, one ſhould ſuppoſe, even at Paris, the coup de grace to this new practice, notwithſtanding the prepoſterous attempts of its partiſans to prove, that this ſucceſs was the effect of the former ſection*.

* See Page 257.

Monſ.

Monſ. Alphonſe le Roy, having performed the operation twice himſelf, and publiſhed an account of both the caſes, with circumſtances as (mentioned before) that Monſ. Baudeloque ſays, require for the ſake of truth, that he even extends the limits of his work to give them a full examination. I ſhall beg leave to tranſcribe his own words without making any reflection; the diſpute was too intereſting to paſs unnoticed in this review, becauſe it tends ſtrongly to confirm my opinion, that all the partiſans of this new operation, have been induced to think more favourably of it themſelves, and to wiſh to make a more favourable impreſſion upon the public opinion, than the thing itſelf will at any rate warrant; at the ſame time I have no doubt, but that Monſ. Alphonſe le Roy will feel himſelf called upon to anſwer Monſ. Baudeloque, and will be able to remove the ſuſpicions ſo injurious to his veracity.

" Une

" Une femme de vingt-huit ans, " d'une taille de trois pieds trois pouces, " groſſe de ſon premier enfant, & fa- " tigée, dit ce Médecin, *de dix-huit* " *heures de ſouffrances*, fait le ſujet de " ſa premiere obſervation."—" Après la " ſection, les os *pubis* s'eloignerent *de* " *plus de deux pouces en ſe retirant ſous* " *les tégumens*, & leur écartement *s'éten-* " *dit enſuite preſque juſqu'à trois pouces* " *en éloigant ſimplement les cuiſſes de la* " *femme au moment où la tête devoit paſ-* " *ſer*. On retourna l'enfant, & on le " tira par un pied."—" L'enfant parut " mort, mais il ſe ranima moyennant " les ſecours qu'on lui donna. Il étoit " fort gros, & ſa tête avoit quatre pou- " ces moins una ligne de diametre tranſ- " verſal, ou d'une boſſe pariétale à l'au- " tre; *de ſorte que*, dit M. *le Roy*, *au* " *moyen de cette opération, j'ai paſſer* " *quatre pouces moins une ligne ſur un* " *baſſin qui n'avoit que deux pouces cinq* " *lignes avant l'opération*. Vingt-huit " jours après, la femme fut préſentée à

" la

" la Faculté, marchant ſeule, ſans ap-
" pui, & n'ayant aucune infirmité.
" Elle commença à ſe lever vers l'épo-
" que du neuvieme jour, & à marcher
" au douzieme."

" Il paroît, d'après l'obſervation, qu'il
" y a eu erreur de quelques lignes dans
" l'eſtimation qu'on a faite du diametre
" tranſverſal de la tête de l'enfant au
" moment même de l'Accouchement,
" puiſque le lendemain on n'a trouvé
" *ce diametre que de trois pouces huit*
" *lignes*. Nous préſumons la même
" choſe de l'eſtimation des diametres du
" baſſin de la femme, & ſur-tout de
" l'écartement des os *pubis* au moment
" du paſſage de la tête. On a publié
" que cet écartement étoit alors de trois
" pouces ou à-peu-près."—" Un pareil
" écartement paroît trop extraordi-
" naire, pour aſſurer auſſi vaguement
" qu'il a eu lieu ; & bien des gens croi-
" ront peut-être n'atteindre au même
" but que ce Médecin, qu'en éloignant
" les os *pubis* à ce degré : s'ils *conſer-*

" *vent*

" *vent l'enfant par ce moyen, ils ſacri-*
" *fieront la mere.*

" Sept jours aprés cette opération,
" M. *le Roy* la fit une ſeconde fois avec
" même ſuccès, ſur une femme du
" Gros-Cailloux, nommée *du Belloy*,
" dont la taille eſt de quatre pieds neuf
" pouces."

" Après la ſection, l'on ouvrit la
" poche des eaux, & l'on dégagea les
" pieds de l'enfant, qui ſe préſentoi-
" ent les premiers. On *engraina* dans
" la ſuite la partie poſtérieure de la
" tête entre les os *pubis*, qu'on avoit
" écartés de trois pouces en éloignant
" ſimplement les cuiſſes de la femme
" le plus qu'il avoit été poſſible ; & l'on
" obtint la ſortie de l'enfant ſans de
" grandes difficultés. On obſerve que
" le diametre *tranſverſe* de la tête étoit
" de trois pouces huit lignes."

" La femme *du Belloy* éprouva des
" douleurs trés-vives après l'opération :
" mais elles furent de courte durée,
" car dès le lendemain cette femme *ſe*

" *por-*

" *portroit très-bien.* On la changea de " lit tous les jours : ſa plaie ſe trou- " va *cicatriſée dès le cinquieme : elle* " *marcha au dixieme, & fut à l'Egliſe* " *le dix-ſeptieme.* On ajoute que " pluſieurs médecins, du nombre deſ- " quels étoit M. *Chaptal* de la Faculté, " & de l'Académie des Sciences de " Montpellier, n'ont pu voir cette " femme au cinquieme jour, ſans une " *ſorte d'admiration*.*"

Monſ. Baudeloque deſcribes two other unfortunate caſes; in one, Monſ. Bonnard at Heſdin firſt performed the diviſion of the ſymphyſis, and afterwards the Cæſarian operation, *the mother died,* but the child was preſerved; in the

" * L'étonnement & l'admiration de M. *Chaptal,* " furent en effet très-grands ; car le lendemain & " long-temps après, il doutoit encore que l'opération " eût été faite, & qu'une femme auſſi-bien conformée " que la *du Belloy,* eût un baſſin auſſi difforme qu'on " lui avoit annonce. Cet exemple ne lui en a point " impoſé, & le Médecin de Paris n'a point converti à " ſon opinion le Médecin de Montpellier."

other

other caſe, which happened at St. Omer's, the mother lived, but *the child died**.

Theſe are all the caſes, where I have been able to procure any information concerning either the circumſtances attending the operation, or even the event of it. Mr. Rouſſel de Vauzeſme mentions, that the operation had been likewiſe performed at Franckfort in Germany, at Conſtantinople, at La Ferté au-Vidame (Firmitati Vicedomini), and Beaunierres en Artois. It has been performed once in Spain by Mr. Cannivell with ſucceſs, as Dr. Duncan relates after his account of Dr. Leake's book, and I underſtand, it has been ſince performed twice in Holland.

It appears from this review, that out of ſeventeen caſes, *five women have died and ten children*, ſo that as Monſ. Baudeloque obſerves, "chaque operation "a eu preſque ſa victime," admitting

* See Page 276.

that

that theſe ſeven children could not have been otherwiſe ſaved, *five women* have been abſolutely ſacrificed for their preſervation, for there does not appear from the acknowledged dimenſions of the pelvis, any neceſſity for the operation in a ſingle inſtance. Monſ. Cambon's ſecond caſe, from the ſhort ſtature of the woman, and the probable diſtortion of the pelvis, together with the complete ſucceſs both to the mother and child, ſeems almoſt the only unexceptionable evidence of the efficacy of the operation, or is the ſingle inſtance where ſome ſuſpicious circumſtance has not ariſen to invalidate the truth of the relation, or very much to leſſen the merit of the practice.

CONCLU-

CONCLUSION.

IT had been part of my original plan in this eſſay, to give an hiſtorical detail of all the Cæſarian operations, which have been performed of late years in Europe; but to have taken ſuch a review, as would have fulfilled this intention with becoming accuracy, or to any uſeful extent, I ſoon found, required more time and leiſure, than I could at this ſeaſon ſpare from my other engagements, and at all events, muſt have protracted the publication, and further enlarged this work, already unavoidably extended much beyond the intended ſize.

But as I have all through this eſſay, holden opinions, concerning that operation, (expreſſed in ſtrong language),

very different from many foreign authors of high reputation, but particularly differing from the opinions and expreſſions in the laſt book on the ſubject, publiſhed in this kingdom, by a profeſſor of midwifery in the firſt ſchool of medicine in the world*. I knew it would be required of me, and indeed, that it was an inſtance of reſpect, due to the character, and ſtation, of that author, not to paſs unnoticed, thoſe opinions, concerning which I have the misfortune to differ, toto cœlo, from Profeſſor Hamilton.

I have all through this eſſay, mentioned the Cæſarian operation as certainly fatal, and the delivery by the crotchet as perfectly ſafe. I was not however to be informed, that the firſt had ſucceeded in one or two recent inſtances on the Continent, nor that the latter had proved fatal in

* Elements of the Practice of Midwifery. By A. Hamilton. Edinburgh 1775.

a very

a very few inſtances in this country. But I truſted, that the general event of the practice in both caſes, ſo very nearly correſponded with that idea, as fully to juſtify both the opinion and expreſſions.

Having conſidered with all poſſible attention, the nature and probable conſequences of the Cæſarian operation, and having carefully examined all the accounts publiſhed of it in Europe, I own, I was moſt exceedingly aſtoniſhed, at the following obſervations of Profeſſor Hamilton; ſpeaking of the neceſſity for this operation, he ſays moſt truly, "that it is a dreadful and hazardous ex-"pedient;" but he then adds, "which "if *timely and prudently conducted*, not-"withſtanding the many inſtances where-"in it has failed, may be *performed with* "*great probability of ſucceſs*." And again, "There are on record *above ſeventy* "*well-atteſted hiſtories*, wherein it (the "Cæſarian operation) has been *ſuc-*"*ceſsfully performed*; for of all the

" caſes related by authors, it has not " *proved fatal to the patient above once in* " *nine or ten inſtances*; which evidently " ſhews the propriety of the practice, " and probability of ſucceſs, both in " regard to the mother's own recovery, " and for certainly preſerving the life " of the child*."

With reſpect to this aſſertion concerning the general event of the Cæſarian operation, I beg leave to ſay, that the Profeſſor muſt have derived his information, thro' channels very different from thoſe which have been acceſſible to me; or he is by no means warranted in his concluſion. For except the very firſt, the *moſt favorable accounts* of this operation, inſtead of confirming the truth of Profeſſor Hamilton's aſſertion, " *that it has not proved fatal to* " *the patient above once in nine or ten in-* " *ſtances*," preciſely reverſe the fact, declaring, that *only one woman out of*

* P. 242 and 251.

ten

ten has eſcaped. Monſ. Baudeloque, the lateſt author on the ſubject, and who ſeems ſufficiently inclined to favour it, ſays this expreſsly, " *L'opera-*
" *tion cæſarienne eſt ſi dangereuſe pour la*
" *femme, qu'à peine ſur dix, il en echappe*
" *une a la mort*†."

I cannot permit myſelf to believe that Mr. Hamilton could mean to refer to the early accounts of this operation, for they are altogether ſo improbable, the facility, with which in them, it is ſtated to have been performed, often, by the moſt ignorant and unſkilful perſons, its general ſucceſs under circumſtances the moſt hazardous, and alarming, in the patient, and under treatment, the moſt injudicious on the part of the operator, the ſubſequent ſymptoms, ſo favorable, and different, from what have been uniformly obſerved in every recent and well-atteſted caſe, but eſpecially *the frequent repetition of it upon the ſame ſubject*, all concur, to render it impoſſible,

† L'Art des Accouchemens, Vol. II. p. 219.

without credulity in the extreme, to regard ſuch caſes as authentic facts, upon the authority of which, we are to direct our future practice, or juſtify ourſelves in the performance of ſo tremendous an operation. But even admitting the truth and weight of theſe relations, yet, however ſucceſsful it may have proved in other climates, and former times, at leaſt we know with certainty, that in this country, and this age, (whatever the alteration of circumſtances may be) it has *proved fatal in nine ſucceſſive caſes*, the whole number, in which it has been performed in this kingdom,* and I think, conſidering where, and by whom the operation was done, Profeſſor Hamilton will hardly venture to ſay, that

* Viz. twice in London, five times at Edinburgh, and once at Leiceſter, (accounts of all theſe caſes have been publiſhed); but it has been performed once ſince, in Northamptonſhire, by Mr. Clark, then of Wellengborough, but now living in London, aſſiſted by Mr. Mansfield of Thrapſton, both able ſurgeons, and particularly eminent in that part of the kingdom for their ſkill in midwifery.

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at leaſt ſome of the caſes were not "time-
" ly and prudently conducted."

The following quotation from the ſame book, while it excites my aſtoniſhment, demands particular notice, becauſe it directly contradicts the principal intention of this eſſay.

" In the city of London, during the
" courſe of the laſt hundred years, of
" *above fifty women* that have preſented
" to the different practitioners and in
" the different hoſpitals with narrow
" pelvis's; that is *from one inch*, to
" little more than two at the wideſt
" diameter; *no more than four or five*
" *of this number have been ſaved*, and
" the whole of the children have been
" deſtroyed; whereas had the (Cæſari-
" an) operation been performed, fright-
" ful and hazardous as it is, *many of*
" *theſe unhappy women*, with their chil-
" dren, would have been preſerved†."

With reſpect to this quotation, I beg leave to aſſure the learned, and

† Page 242.

ingenious author, that concerning the event of the caſes of the moſt deformed pelvis's in this city, (not however "*of* "*one inch diameter*," for I know of none ſuch, but the ſmalleſt, of which any account can be procured), he has been altogether miſinformed in point of fact; for, from my own experience of five-and-twenty years, as well as upon the moſt accurate information which, as it was my indiſpenſable duty, I have made my particular buſineſs to procure from others, I will venture to aſſert, that inſtead of *only four or five women being ſaved out of fifty, the proportion is at leaſt reverſed*, and the number ſtated in the quotation to be ſaved, is at the utmoſt, the number loſt. One chief intention of this eſſay, was, to endeavour to diminiſh at leaſt, if not abſolutely ſuperſede, the neceſſity, of the Cæſarian operation, and to ſubſtitute the uſe of the crotchet, in its ſtead; to effect this purpoſe, I have repeatedly inſiſted upon the acknowledged fatality of that operation, and

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the comparative ſafety of the crotchet, and I have endeavoured to demonſtrate upon principle, and confirm by experiment, the poſſibility of the ſucceſsful application of that inſtrument, in very many of thoſe deformed pelvis's, where that fatal operation has uſually been reſorted to, and is ſtill invariably recommended†. But, if only one woman has been loſt out of ten by the Cæſarian operation, and only one out of the ſame number ſaved, where the crotchet has been uſed; if this direct, or implied repreſentation of the event of the two methods, given by Profeſſor Hamilton *be true, mine muſt be falſe*; and if the prac-

† See, quoted before, Stein, Levret, Baudeloque, Roederer, Saxtorph, and laſt of all Profeſſor Plenck (Elem. Art. Obſtet. Viennæ 1781, p. 212), who ſpeaking of the Cæſarian operation, ſays expreſsly, Indicatur

1. "Quando diameter conjugata in pelvis introitu "3 *pollicibus eſt anguſtior*, et fœtus vivus, &c.

2. "Quando conjugata ſuperior pelveos *duobus* "*pollicibus eſt minor*, etſi fœtus ad ſit mortuus. In "hac enim *pelvis anguſtia, excerebratio, & extractio fœ-* "*tus maturi impoſſibilis eſt.*"

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tice he recommends *be right, mine muſt be obviouſly, and ruinouſly wrong*. But as I am perſuaded, Profeſſor Hamilton has been betrayed into a haſty opinion, in one inſtance, from want of the beſt information, and in the other, from actual miſinformation, ſo I truſt, that upon this ſuggeſtion, his candor and maturer judgment will lead him at leaſt to correct, if not altogether retract an opinion, demonſtrably ill-founded; an opinion too, not upon a ſpeculative point, or of a trivial nature, but of the firſt practical importance, involving in its probable conſequences the deareſt intereſts of humanity, and than which, nothing may eventually be of greater moment, to thoſe perſons, who, from extreme deformity, unhappily become the objects of its influence.

Before I conclude, I will beg leave to recapitulate, and collect into one point of view, the ſubjects which I have conſidered, and the poſitions which I have attempted

attempted to eſtabliſh, in the preceding eſſay.

Firſt. I have endeavoured to demonſtrate the phyſical neceſſity of the ſuperior difficulties of human, to comparative parturition, even in natural labour, from the difference between the erect, and horizontal poſition of body; and particularly the effects of that difference in creating laborious parturition, the ſubject of this eſſay, which is therefore unknown to the quadruped.

Secondly. I have endeavoured to prove, that a child at full maturity, cannot be born alive, by any means of nature, or art, through the natural paſſage, where the dimenſions of the pelvis are not *two inches and three quarters from pubis to ſacrum*; therefore, that in all ſuch caſes, the head of the child muſt be leſſened, and being leſſened, I have endeavoured to demonſtrate, that it may be ſafely extracted by the crotchet, wherever there is a ſpace equal to *one inch and a half from pubis to ſacrum*, dimenſions much leſs, than what

what have invariably been ſuppoſed to require the Cæſarian operation, even in the lateſt and beſt books.

Thirdly, I have endeavoured to eſtabliſh the preference of this method by a comparative eſtimate of the two lives, unhappily, but unavoidably placed in competition.

Laſtly. The lamentable neceſſity of ſuch violent means being eſtabliſhed, I have endeavoured to prove the utility of opening the child's head as early as poſſible, and of delaying the ſubſequent delivery at leaſt thirty hours, in order to induce putrefaction, and thus facilitate, and render more ſafe, the future extraction by the crotchet; and by attention to theſe circumſtances, I have aſſerted, and experience confirms the aſſertion, that delivery by the crotchet may always, be effected with perfect ſafety to the mother.

In the ſecond chapter I have collected together what appeared to me, the moſt curious, or eſſential parts of ſeveral books publiſhed on the diviſion of the ſymphyſis,

ſis, in the manner of a review or hiſtorical detail.—I have particularly ſtated the objections to the new operation, and taken, what I thought, the moſt ſatisfactory manner of confirming thoſe objections, by putting my readers in poſſeſſion of the hiſtory, and event of all the caſes, where it has been actually performed, and which together, have induced me to give a decided opinion againſt the operation.

I will now only beg leave to add, that wherever I have had the misfortune to differ from others in opinion, I have meant to expreſs myſelf towards them with candour and civility, conſcious, on many accounts, of much needing, and therefore hoping and claiming, the ſame indulgence; but having no predilection for the opinions advanced in the preceding pages, further than as they appear, to be founded in truth, and connected with the intereſts of humanity, or the general welfare of ſociety, I am ready, moſt chearfully to ſurrender one, or all

all of them, upon conviction of error, endeavouring to adapt my conduct and feelings to this admirable controverſial maxim, REFELLERE SINE PERTINACIA,—REFELLI SINE IRACUNDIA.

P. S. Since the laſt ſheet went to the preſs, I have been favoured with Dr. Krapf's (Phyſician to the late Empreſs) experiments, and remarks, on the ſuppoſed dilatation of the pelvis, in natural labour, and the diviſion of the ſymphyſis pubis in laborious labours. It does not appear, that this operation has ever been performed on the living ſubject at Vienna. Dr. Krapf's experiments, however completely eſtabliſh a theoretical objection very early ſuggeſted againſt the practice, viz. the probable injury to the poſterior joints of the pelvis; and they likewiſe prove that an anchyloſis be-

† Anatomiſche Verſuchi, und Anmerkungen. Car. von Krapf. Vien. 1781.

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tween the illia and ſacrum, is very far from an uncommon circumſtance, even in the youngeſt child-bearing women, from twenty, to thirty years of age, as ſtated before, and which muſt, wherever it exiſts, prevent all poſſibility of benefit from the operation.

I find by converſation with the ingenious Dr. Loder, of Jena, ſince his viſit to Paris, and his knowledge of the event of the caſes related in the laſt ſection, that he has abated much of that enthuſiaſm for the diviſion of the ſymphyſis, which he has expreſſed in his theſis, altho' he does not entirely acquieſce in the opinion with the author of this eſſay, that "*no circumſtances whatever can ren-*"*der it a warrantable operation.*"

FINIS.